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RHEUMATIC FEVER*

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MANY of the laity still have confused ideas about rheumatism, thinking that the disease is largely confined to middle and old age. They express surprise when told that the most dangerous form occurs in childhood and young adult life. Even physicians are still doubtful about the classification of the various types, and those who are giving the matter active consideration are endeavoring to standardize the nomenclature, but all are able, with some exceptions, to separate acute articular rheumatism, rheumatic fever, from the three chronic forms —atrophic, hypertrophic, and infectious arthritis.

When I was a house officer, rheumatic fever, which was much commoner than it is today, was fairly easily recognized. Rubor, dolor, and tumor, the triumvirate of inflammation, were present in a joint and moved about from day to day. We found that the patient had gotten wet or chilled, and soon the inflammatory process showed itself. We put him to bed, soothed his joints with splints and applications, gave him salicylate of soda and a bland diet.

Sir Andrew Clarke, when once asked what he considered the best treatment for rheumatism, replied, "Six weeks." We generally gave our patients six weeks, at the end of which time they were ready to leave the hospital. We bade them goodbye and stood ready to welcome them upon their return, which was sure to occur in numerous instances.

Since then much investigation has been carried on to determine the etiological factor, or factors, in rheumatic fever, but so far definite bacteriological causes have eluded us. The definition by Osler in 1919 still holds,—"An acute infection, dependent upon an unknown infective agent and characterized by multiple arthritis and a marked tendency to inflammation of the endocardium of the valves of the heart."

INFECTIVE AGENTS

If you will pardon a medical platitude, no test nor laboratory finding is valuable unless it becomes available to numerous investigators. If inconstant in the hands of trained men, under the best conditions, it is generally useless. As Riesman has remarked, acute rheumatic fever is not a unit disease like typhoid fever or diphtheria, manifesting itself in a more or less uniform manner. Yet typhoid fever, it seems to me, is quite as lacking in the order of its clinical appearances as rheumatic fever. In rheumatic fever, tonsillitis and cardiac involvement, with little or no joint involvement, predominate in one case, while in another the joints are chiefly involved. Typhoid is uniform only in the constant presence of its causative infective agent. The search for this agent in rheumatic fever has so far failed.

In 1914 Rosenow isolated from the joints, blood and tonsils in rheumatic cases, three different strains of diplostreptococci and cultivated them anaerobically. Two of them caused in rabbits, arthritis, pericarditis, and endocarditis, while the third caused myositis and myocarditis in addition. Rosenow believes that nonvirulent streptococci acquire in the tonsils new specific properties which make them capable of giving rise to rheumatic fever. Riesman believes, however, that many facts militate against the primary etiologic importance of the streptococcus, although just as in scarlet fever, smallpox, and influenza, it may become an important secondary invader. How much we were impressed with this during the influenza epidemic of 1918, when the streptococcus hemolyticus was so often found post mortem. Riesman, furthermore, believes that the absence of suppuration, the therapeutic action of the salicylates, the usually sterile character of the joint fluid and the blood, make it highly improbable that the streptococcus is the primary organism of rheumatic fever.

Poynton and Paine created some stir in the medical world with their diplococcus rheumaticus. Sir James Mackenzie, in 1914, spoke with assurance of this organism, although he admitted that many later investigators had failed to isolate it. On one occasion Poynton did isolate the organism from the pericardial fluid, but the organism must be inconstant or it would have been found more frequently by him and others. No characteristic post-mortem lesions have been seen in acute rheumatic fever other than the Aschoff bodies in the heart muscle, but so far as is known, neither the streptococcus nor the diplococcus rheumaticus has been isolated from these fresh nodules. In cases in our wards where

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blood cultures have been made, we have found the streptococcus and pneumococcus when the temperature was high, but sterile when the blood was taken with slight fever.

As to opinions which are held that the rheumatic virus may survive in the tonsils, pericardium, and endocardium after the primary attack is over, and thus hiding itself away may account for relapses, I have nothing to offer, except that it seems altogether visionary. It is well that those who advance this theory also speak of the possibility of reinfection from without. Osler thought that those who have had rheumatic fever seem more susceptible to recurrence. He also spoke of the disease as coming in waves every few years, suggesting an epidemic. Alexander Lambert, in 1919, studied the lowered incidence of rheumatic fever in the Bellevue Hospital and concluded that its striking diminution was due to the better care of the throats, noses, and teeth of the school children. In this hospital the reader has come to regard rheumatic fever as a fairly uncommon disease, but last winter was an exception, bearing out the statement of Osler and others that epidemics of rheumatic fever occur from time to time.

FOCI OF INFECTION

We may not know the definite infecting agents in rheumatic fever, but we have some knowledge of the foci of infection. Many of these we have known, or suspected, such as tonsils, teeth, and sinuses. E. E. Irons and others have called attention to the possibility of acute arthritis arising in the upper and lower respiratory tracts and the intestinal wall. A chronic suppuration in any part of the body may act as a focus.

THE TONSILS

Janeway, in his Shattuck lecture in 1916, expressed his doubt of the bacterial agents which have been acclaimed as the cause of rheumatic fever, but he did hold out hope of prophylaxis by a study of the portal of entry. He did not feel that tonsillectomy was a prophylactic panacea,—indeed, he even had grave doubts as to its usefulness after the patient had suffered an attack of rheumatic fever, but he did not allow these doubts to prevent the patient from receiving what benefit the operation might give. Of course, when he made this very last statement, he was thinking of rheumatic heart disease. I believe, however, that even if rheumatic heart disease has declared itself, tonsillectomy is as clearly indicated as in a case where rheumatism has never occurred, but where the tonsils are definitely diseased.

St. Lawrence (*J. A. M. A.*, October 16, 1920) studied the effect of tonsillectomy on the recurrence of acute rheumatic fever and chorea in a group of 94 children, and concluded that tonsillectomy seemed to be the most important measure at present available for the prevention of acute rheumatic fever and allied rheumatic affections. Alexander Lambert (*J. A. M. A.*, April 10, 1920) concluded that tonsillectomy played an important part in the reduction of acute arthritis in the Bellevue Hospital. Lillie and Lyons of the Mayo Clinic studied 200 consecutive cases of tonsillectomy in myositis and arthritis and concluded that the operation was justifiable in every frank case, with marked improvement in 79 per cent. of all cases.

The above testimony is comforting, but I am satisfied from an experience of more than twenty years that tonsillectomy has much to recommend it. I make this statement not as my "opinion" or my "belief" but from cases which I have actually followed. Tonsillectomy means complete removal of the tonsils. Nothing short of this will do. I discourage all halfway measures such as cutting out the crypts, and I am doubtful of the efficacy of shrivelling by x-ray or radium. A small amount of remaining tonsil, with two or three infected crypts, is as bad as a whole tonsil, and the small, bound-down tonsil often more dangerous than the large, ragged one. When patients tell me that they have already had tonsillectomy, I inquire the date, and if the operation fell within the time of the tonsillotome, I am sure that another and complete removal is indicated. If the physician is in doubt about the condition of the tonsils, he should have them examined by a competent throat specialist.

What is the basis for that hesitation which no small number of physicians still feel toward tonsillectomy? If one's successes outweigh the failures, as in my experience, is not that sufficient reason for operation? Of what use can obviously diseased and useless tissue be, and if one has had success in terminating attacks of rheumatic fever, why should the procedure be neglected? The patient is better off without these harbors of bacteria. Even if the operation fails, the failure may be due to the presence of other undiscovered foci. It took many years for abdominal surgeons to learn that the lesion looked for was often not the only one. Physicians must learn this about the foci of infection. There is rarely a sudden death during the operation. In hospital practice I have seen a number of cases of lung abscess following tonsillectomy, but in private practice I have never had this unfortunate result. Occasionally an attack of rheumatic fever, generally mild, is induced by the operation. I usually tell patients that they may have some joint pains immediately after. All of these risks must be taken to avoid the dangerous cardiac sequelae of rheumatic fever.

THE TEETH

Taken by and large, teeth are less frequently the cause of rheumatic fever than tonsils. It is

much easier, however, to induce people to have their teeth treated or extracted, than their tonsils. Just as the small, imbedded tonsil is more dangerous than the large, boggy one, so a small root abscess may be more important than a loose, abscessed tooth. Inspection of the teeth, even by a good dentist, is sometimes uninforming, and x-ray plates, which should always be made in a thorough search for foci, must be taken and interpreted by a trained person. In the summer of 1919 a strong, well-developed Irishman, 44 years old, entered the hospital. Four days before entrance a dentist had excavated the only diseased tooth he had and had put in a temporary filling. Before he could return for the permanent filling he was seized with rheumatic fever, and at the time I saw him had a well-marked pericarditis. Evidently the disturbance of a small focal infection resulted in a general one with cardiac involvement.

OTHER FOCI

These may be dismissed with a word. The sinuses should be thoroughly inspected. When the head has been eliminated as the seat of infection, the search becomes progressively more difficult and unsatisfactory in results, but should be carried out with the greatest care.

DIAGNOSIS

A polyarthritis with fever involving the larger joints and the fingers, very painful and shifting from joint to joint, is usually recognized. In adults the joints are often markedly involved, while the heart may escape damage, but in children the joints may be only slightly affected and the heart seriously injured. Sometimes the joint pains are so slight in children that the physician entirely disregards them until a serious heart condition forces itself upon his attention. "Growing pains" should be taken very seriously. Tonsillitis is as important in its bearing on the heart as polyarthritis. I have long regarded chorea as one sign in the symptom-complex of acute rheumatism, and have managed it very much as I would an acute polyarthritis.

The symptom-complex of acute rheumatic fever may appear in almost any order. Sometimes the tonsillitis and heart lesions may precede the polyarthritis, or the order may be reversed. Rarely a purpura or erythema multiforme will appear before the other signs. Chorea and the heart lesion may be the only objective symptoms. Some years ago, when I was connected with the Children's Service of the Boston Dispensary, I noted that chorea often showed itself among school children in the fall and spring. It was limited to earnest children who took the beginning of the school year and the examination period too seriously. They exhibited this symptom of rheumatism because their resistance was lowered at such times.

In adults one may find, in addition to polyarthritis, tonsillitis and carditis, bronchitis, pleurisy, myositis and nephritis. Never be in a hurry to discharge a case of mild tonsillitis. Some years ago I discharged a case of slight tonsillitis and ten days later was called to see the young woman because she was passing bloody urine. I found that she had an acute nephritis, from which she made a good recovery. She had no cardiac involvement.

The conditions which may be confused with rheumatic fever are osteomyelitis, gonococcus arthritis, general sepsis, locomotor ataxia, the flare-up of a general arthritis, trichinosis, flat feet, and gout. Most of these conditions will be easily separated from rheumatic fever if the physician has them in mind. Probably the most dangerous is osteomyelitis, and it is not uncommon to hear in private and hospital practice of a case of osteomyelitis which has been treated for rheumatism before being admitted. I see such a case almost every year. The intense reaction, rapid onset, marked fever, and prostration of the patient should always warn the physician of this very serious condition, which is in as much need of immediate operation as a perforated appendix or a strangulated hernia.

Gonococcus arthritis is often limited to one joint, but may be multiple. The reaction is much less, and a history of the infection or the finding of the Neisser organism in the secretion will help to confirm the diagnosis.

THE HEART

Aside from the suffering and economic loss caused by rheumatic fever, the disease would not be so very important were it not for the possibility and, in children, the probability of cardiac lesions. Here lies the great danger and crippling power of the infection. The heart should be examined as soon as the patient comes under observation and at regular intervals during the course of the disease. The physician should have in mind the fact that in rheumatic fever after one structure of the heart becomes involved, it is quite possible that all the others will be. Therefore, it is very important to discover a transient pericardial rub. It may be the only evidence at the time of heart involvement, but it may warn the physician to search carefully during the course of the disease, and later, for cardiac lesions. It may also explain the signs suggesting later a pericardial effusion. Myocardial trouble may be indicated by a rapid pulse after the fever has subsided, and endocarditis by murmurs, but during the course of the disease the physician should not be in too great a hurry to make a cardiac diagnosis. He should wait until all of the symptoms have

quieted down and should form his opinion from the signs that are left. It should always be remembered that the cardiac lesion most often resulting from rheumatic fever is mitral stenosis, and that this lesion may not show itself for months after the termination of the acute part of the disease. Sometimes aortic regurgitation accompanies the mitral stenosis, but one should not make the diagnosis unless the circulatory signs of aortic regurgitation are evident. A systolic murmur arising during, and persisting after, the attack should suggest the possibility of the subsequent appearance of the signs of mitral stenosis. A mid-diastolic murmur heard with greatest intensity at or near the mitral area, unaccompanied by the circulatory signs of aortic regurgitation, should also point to mitral stenosis.

TREATMENT

Of all the drugs which have been tried in rheumatic fever, the best is salicylate of soda. It should be given in large doses, twenty grains, every two hours, accompanied by twice as much bicarbonate of soda, which seems to allay gastric irritation to some extent. If these large doses, accompanied by large draughts of water, can be taken early they often reduce the violence of the attack in its incipiency. Later, sometimes at the end of twenty-four hours, vertigo, tinnitus aurium, nausea, vomiting or diarrhea call for a reduction or cessation of the drug. Smaller amounts, up to the tolerance of the patient, may then be given. Sometimes delirium is induced by too large or long dosage with salicylate of sodium, or it may occur in persons very susceptible to the drug. In one case of rheumatic fever in a man of fifty, which I saw in consultation, there were attacks of syncope with convulsive movements and a pulse of forty, suggesting Stokes-Adams syndrome. He had had a severe attack of rheumatism and had been given large doses of salicylate of soda without other medication. The attacks stopped within a few hours after the cessation of the drug. In a number of cases of rheumatic pericarditis with effusion I have seen the signs subside under salicylate of soda, although some have stated that it should not be given in this condition because of its depressing effect on the heart. The depression is probably due to the toxemia and not to the drug. Just how long salicylate of soda should be given is often a question. I usually continue it in small doses well into the convalescence. Sometimes when it has been stopped the joint symptoms return. When cases have been long continued and a focus has been found I have had the focus removed during the attack with satisfactory results. If salicylate of soda fails, I have tried aspirin or salacin. Capps has recently tried in a small series of cases of malignant endocarditis the use of cacodylate of soda. The dose in adults ranges from one-fourth to two grains, with a daily dose of seven or eight grains. In children from six to ten years old the maximal dose is from one-third to one-half grain. Although often given by mouth, it lends itself well to hypodermic injection. In two cases of malignant endocarditis at the Boston City Hospital this year, cacodylate of soda was given a thorough trial, and at first there seemed to be slight improvement, but both patients soon became worse in spite of the treatment. Dr. Frank Billings, in discussing Capps' paper, reported one case in which he felt that cacodylate of soda had saved a patient's life.

I also believe in using local applications, oil of gaultheria, bandaging the joints with large, loose cotton dressings,—plenty of water should be given, either plain or as lemonade. The food should be the same as in other fevers,—milk, cereals, broths, cocoa, etc. Flannel next to the patient seems to give warmth and comfort. If the pain is very great, morphine may be necessary.

When the patient has recovered from the inflammatory process, it is because his resistance has been raised, but we are not doing our full duty to these people unless we find the focus of infection, eradicate it, and in this way strive to prevent a recurrence. My instruction now to my house officers is never to discharge a patient from the hospital until a thorough search for foci has been made. Whether the heart has been involved or not makes no difference. If it has escaped during the first attack it may succumb to the second if we do not prevent it. If the heart has been damaged, the prevention of rheumatic fever by the removal of foci may save the heart from additional injury.

PULMONARY SYPHILIS

BY JOHN B. HAWES, 2D, M.D., BOSTON

DURING the past twenty years during which I have been engaged in the study of diseases of the heart and lungs I cannot recall ever having seen a patient in whom I felt that the diagnosis of pulmonary syphilis was definite and certain. I have seen a few cases in which I felt that pulmonary syphilis was a likely and a probable diagnosis, and I have had numerous cases referred to me with this diagnosis. In my work in tuberculosis I have been impressed by the tendency of doctors when dealing with tuberculosis of the lungs to attribute every other ailment or complication which may arise to the same organism,—the tubercle bacillus. This likewise occurs far too often in syphilis. When one sees a patient who is known to have lues with a positive Wassermann and other stigmata of the disease who develops a cough with sputum persistently negative, along with certain signs

in the lungs, it is very easy to take for granted on far too little investigation and on far too little evidence that the process in the lungs must be syphilitic.

Pulmonary syphilis is really extraordinarily rare. Osler found only twenty cases of syphilis of the lung in 2800 autopsies. In eight of these twenty the disease was congenital; in eleven there was definite gummata; and in only three was syphilis suspected clinically. Other men engaged in the same line of work with whom I have talked on this subject, such as E. R. Baldwin of Saranac Lake and James A. Miller of New York City, have agreed with me as to the extreme rarity of this condition. At clinics devoted to the treatment of syphilis connected with our dispensaries and out-patient departments the diagnosis is not a common one. Between the years of 1908 and 1923 at the Massachusetts General Hospital there are five cases on record; between 1903 and 1916 in the Out-Patient Department only eight cases are recorded; while of nearly 5000 autopsies that have been performed at that institution pulmonary syphilis has been found in only one instance.

Syphilis may be congenital or acquired. I am considering here only the latter type. It may take the form of gummata or of an extensive fibrosis, sooner or later accompanied by bronchial stenosis with resulting ulceration and destruction of the lung tissue. As Evans[2] of San Francisco points out, until stenosis with its accompanying changes takes place, the disease may reach a fairly advanced stage in the lungs with practically no symptoms except shortness of breath. This he considers to be one of the most striking symptoms of this condition. The process is rarely located at the apices and usually commences at the hilus, extending eventually toward the bases. The diagnosis usually depends upon the results of therapeutic treatment, but even this is not a conclusive test. Pottenger[9] wisely states that "the fact that a person having a pulmonary lesion reacts to tuberculin in one case and gives a positive Wassermann reaction in the other does not prove that in one case the pulmonary lesion is tuberculous and in the other syphilitic," and continues with equal common sense to sound the warning that "the comparative infrequency of syphilitic infection of the lung should cause one to assume that the process is tuberculous unless definitely proved otherwise." Tuberculosis and syphilis often occur together. There are a few who believe that syphilis may modify the course of pulmonary tuberculosis favorably on account of its tendency to form fibrous tissue, which is, of course, much to be desired in the healing of a tuberculous lesion. I have no sympathy with this point of view and feel sure that the combination of the two diseases, tuberculosis and syphilis, no matter which was the initial lesion, is a most vicious and malignant one.

Landis[6] refers to two forms of syphilitic lesions,—gummata and infiltration,—the latter being by all means the most common form. He describes the process as usually unilateral, beginning at the hilus and working out, and only rarely involving the apex, where it closely resembles tuberculosis. The diagnosis, in his opinion, is made usually by exclusion. With this statement I am in hearty accord.

Marshak[7] comments upon the frequency of pulmonary syphilis in sanatoria for negro consumptives. Here it is a far advanced lung lesion with prominent signs of consolidation, frequently in the left lung between the second and fourth ribs. When associated with symptoms of secondary syphilis, such as fever, hoarseness, loss of weight and strength and appetite, it strongly resembles pulmonary tuberculosis. The first requirement in diagnosis must be a positive Wassermann test. In his experience, on treatment the lesion clears up rapidly. Evans[2] states that a syphilitic process at the root of the lung, unless it involves the trachea or bronchi, may give rise to no symptoms whatsoever. With the advent of stenosis at the main bronchus progressive destruction of lung tissue may ensue, as in a tuberculous lesion. In nearly all such cases stenosis of some main part of the bronchial tree is present. As mentioned above, he considers shortness of breath a most prominent symptom of a luetic lung lesion. This is often entirely out of proportion to the apparent pulmonary condition, sometimes becoming paroxysmal and assuming the character of bronchial asthma. Cavity formation is rare. Expectoration is usually scanty, unless as a result of bronchial stenosis a secondary bronchiectasis has developed. Tuberculin tests do not offer much aid. Repeated examinations of the sputum, together with a most careful history and a thorough search for evidence of syphilis elsewhere in the body, rather than the result of physical examinations of the chest, must remain our most useful means of recognition. He quotes Dieulafoy as follows: "In dealing with a patient considered as a case of incurable tuberculous disease, let us think of syphilis, and if repeated examination of the sputum shows the absence of Koch's bacillus let us have an immediate course of specific treatment." Evans naturally adds to this the necessity of having a positive Wassermann reaction.

My own tendency would be to reverse Dieulafoy's statement and to urge that every physician when dealing with a case which he believes to be syphilis of the lung take it for granted that tuberculosis may be present and give the patient the benefit of prolonged hygienic treatment, emphasizing rest, in addition to antiluetic measures.

G. Burton Gilbert of Colorado Springs has given the details of two cases of pulmonary syphilis concerning the diagnosis of which I do

not see how there can be any doubt. He believes that syphilis of the lung will not be such a rarity when physicians in general recognize the possibility of its presence. All cases with lung symptoms or signs, without tubercle bacilli in the sputum, who do not do well under sanatorium régime should be investigated for syphilis. Points in the diagnosis are the history of exposure or infection, or of luetic symptoms, the presence of other luetic lesions in the body, especially arterial changes and thickening of periosteum of the long bones, a positive Wassermann test and the results of treatment. In his experience 6 per cent. of the cases of pulmonary tuberculosis also have syphilis. He does not mean by this, of course, that this syphilitic infection involves the lungs. Funk and McRae,[4] in a study of 1200 patients referred to the Jefferson Chest Hospital as consumptives, found 72, or 6 per cent., to be non-tuberculous, and of these four were cases of pulmonary syphilis. In a great majority of our sanatoria at the present time the Wassermann test is made on every patient who enters the institution as a routine measure. Should this procedure become a universal one, more cases of this interesting condition would be discovered.

Munro of London, in a recent article reports that out of 100 admissions to an institution for consumptives 6 per cent. had syphilis of the lung and 11 per cent. had positive Wassermanns and sputums positive for tubercle bacilli. He does not state exactly how he proved that 6 per cent. of these 100 had syphilis of the lung, however, and I am extremely skeptical as to this large incidence of pulmonary syphilis. He states that in making a diagnosis of pulmonary syphilis the Wassermann reaction must be positive and the lung signs are usually found at the base, especially the right. Why Munro chooses the right rather than the left I do not know. All cases left untreated develop bronchiectasis, in his opinion.

Dr. Abner Post[5] of Boston, who is as well qualified to speak concerning syphilis and its complications as anyone, in 1916 reported two cases of syphilis of the lung. I have talked these cases over with him and am convinced of the correctness of the diagnosis. He makes the following conclusions, however, in which I am not with quite such hearty accord: "Diseases of the lung in which consolidation is found in unusual positions, limited entirely to one lung, in which tubercle bacilli have not been found may be considered suspicious of syphilis. If the Wassermann test is positive the suspicion is much greater and may almost be regarded as a certainty. Certainly consolidations in unusual positions, with the absence of tubercle bacilli and in the presence of a positive Wassermann, does not permit the diagnosis of tuberculosis." Those of us who have had extensive experience in tuberculosis will not agree with that last statement of Dr. Post. The manifestations of pulmonary tuberculosis are too protean to admit of this. I have seen patients with basal lesions whose sputum has been examined repeatedly and in whom the diagnosis of bronchiectasis or some other non-tuberculous lesion has been made suddenly show large numbers of tubercle bacilli in the sputum. I have seen tuberculosis simulate abscess, pneumonia, bronchiectasis, pulmonary stenosis, and about every other condition. I do not feel, therefore, that because the sputum is negative, and the lesion is at the base instead of at the apex, and because there is a positive Wassermann test that tuberculosis can be excluded. If, as a result of anti-luetic treatment, the lesion clears up I should be convinced, but not otherwise. Dr. Carl C. MacCorison, superintendent of the North Reading State Sanatorium, has given me the details of a patient admitted to his institution in whom he finally made a diagnosis of pulmonary syphilis. With this diagnosis I, although a skeptic, have concurred. This case was as follows:

A. C., a man of 40, with a negative family history, but admitting venereal infection, first noticed enlarged glands in the neck in 1907. He began to feel run-down and was compelled to give up work in February, 1908. Since then he lost in strength and developed a troublesome cough, especially at night, with several small hemorrhages. He entered the North Reading State Sanatorium on October 5, 1909, in a very weak condition, weighing 75 lbs. His temperature ranged from 97 to 100, and his pulse from 80 to 120. There was a swelling one inch in diameter, above the styloid process of the right ulna, and a similar swelling over the first metacarpal bone on the right hand; there was an irregular ulcerated area, size of the palm of the hand, over the sternum and clavicle; over the left tibia there were two similar areas somewhat larger in size. The left lung was apparently normal. The right showed dullness in the axillary region and over the upper half, posteriorly, and numerous fine, crackling râles. He was started on iodide of potash, following which, the swelling described above almost immediately began to subside, and in a week's time the ulcerated area on the chest healed over entirely while his weight and strength gained remarkably.

Three months later the lungs were almost clear. Shortly after this, he was given a subcutaneous tuberculin test with a negative result. The sputum was persistently negative. He was discharged from the sanatorium April 3, 1910, having improved constantly and having gained 35 pounds since admission.

Two years later Dr. MacCorison received a letter from him stating that he had worked every day since April, 1910, that he was earning better wages than ever before, and that he was feeling better than he had for years, with no cough or expectoration.

Successful treatment depends upon early diagnosis and prompt and efficient anti-luetic treatment. If tuberculosis is present, salvarsan is preferable to iodide of potash, although I personally cannot recall a case where I could persuade myself that small doses of iodide of potash have ever done any harm, even in active tuberculosis. I would emphasize, however, what I said before, namely, the importance of treating the patient along general hygienic lines, taking

it for granted that tuberculosis of the lungs may be present, although it cannot be proved.

I would summarize my opinion in regard to pulmonary syphilis as follows:

1. Pulmonary syphilis is an extremely rare condition, although undoubtedly not diagnosed as frequently as it should be.

2. It may closely resemble tuberculosis or may exist along with tuberculous disease of the lungs.

3. Under no conditions can it influence tuberculosis favorably.

4. Given a patient with a definite syphilitic history, a positive Wassermann, and signs of syphilis elsewhere, who has in his lungs, by x-ray and clinical examinations, evidence of an extensive, destructive process with the sputum constantly negative to tuberculosis, pulmonary syphilis should be strongly suspected. If this process is at the hilus or base, rather than the apex, the diagnosis of syphilis is still more likely. If the process under anti-luetic treatment clears up rapidly, the diagnosis of pulmonary syphilis may be considered definite.

5. Treatment depends upon early diagnosis and prompt and efficient treatment. The possibility of tuberculosis being a factor in the patient's condition should, likewise, be borne in mind, and hygienic, constitutional treatment instituted along with anti-luetic measures. In syphilis we treat the disease, while in tuberculosis we treat the patient.

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[This list of references is by no means complete but each in my opinion is important.—J. B. H.]

THE VALUE OF CAECOSTOMY IN ADVANCED CANCER CASES ASSOCIATED WITH OBSTRUCTION

BY WILLIS E. HARTSHORN, M.D., NEW HAVEN, CONN.

Obstruction of the large intestine from cancer develops as a rule much more slowly than the acute type seen in the small bowel. Its onset varies, depending on the location and the extent of the growth. Sudden complete obstruction always presents a train of very active symptoms and needs immediate treatment. This is true, of course, whether in the large or small intestine. In the case of the colon the intense toxic poisoning is not noted which is characteristic nearer the stomach. These patients are usually of more advanced years and suffering from the effects of an insidious cachexia due to malignant disease. Therefore the simplest kind of an operative procedure is that of choice. This is offered by novocaine for anesthesia and a caecostomy. Often months of comfort can thus be given these individuals before their demise.

The obstruction may be due to actual cancer of the colon or to pressure from masses of cancerous tissue primary in the uterus, bladder, or adjacent organs. The case reported represents the latter type.

The patient, sixty-two years of age, was referred to me for treatment on May 1, 1922. At this time she complained of abdominal pain located in the right lower quadrant. As she gave a history of having noted a bloody vaginal discharge nine months previously, an examination was made and an inoperable cancer of the uterus diagnosed. Two days later she developed obstruction of a fairly active type associated with constant vomiting. The conclusion was obvious that this was due to pressure from the mass in the pelvis. She was at once taken to the hospital, in a much weakened condition, and a caecostomy done under local anesthesia with very little shock. I found at this time extensive metastases to the parietal peritoneum and several large masses attached to the fundus of the uterus which were pressing on the sigmoid. Twenty-four hours later an opening was made into the caecum through the caecostomy wound, with the cautery, and the obstruction at once relieved.

As soon as she had regained her strength one hundred milligrams of radium was inserted into the cervix and allowed to remain there for twenty-four hours. X-ray treatment was also instituted. Each quadrant of the abdomen was as carefully covered as possible during a series of applications. For about two weeks the caecostomy wound drained freely. During the third week she began to have bowel movements by rectum, and two weeks later the opening in the cecum had practically closed, requiring dilatation in order to keep it open as a vent for the gas which rapidly accumulated in the large bowel. She then returned to her home, where she died September 14, having enjoyed comparative comfort since the operation on May 4.

The objection is frequently raised that an opening into the bowel makes life so miserable that it is preferable to allow these advanced cancer cases to die. It is often forgotten that this same opening will give relief from the obstruction and at the same time, in many cases, reduce the inflammatory reaction about the area involved so that normal bowel movements may be resumed and the caecostomy opening will close of its own accord in a comparatively short time.

Operation.—Using a 2 per cent. novocaine anesthesia, a split incision is employed in exactly

the same manner as is done in the McBurney operation for appendicitis. This gives the maximum sphincteric action if the opening becomes permanent, and easy closure if temporary. The peritoneum is opened. The caecum drawn up into the wound and sutured to it with catgut. The closure is partial. The gut is opened with the cautery 24 to 48 hours later, depending on the patient's condition.

The same procedure is valuable in cases suffering from obstruction of the colon due to operative cancer where the patient's condition will not permit of an immediate resection of the cancer-bearing area, or any type of colonic obstruction associated with distention.

The case reported is mentioned to emphasize the simplicity of the procedure and its important bearing on the subsequent life of the patient, short though that may be; also to lay stress on the importance of x-ray and radium as adjuncts to this treatment in certain types of cancer.

67 Trumbull Street.

Book Reviews

Pediatrics by Various Authors. Edited by Isaac A. Abt, M.D., Professor of Diseases of Children, Northwestern University Medical School, Chicago; Attending Physician, Sarah Morris Hospital for Children of Michael Reese Hospital, Chicago. Volume II with 180 illustrations. Philadelphia and London: W. B. Saunders Company. 1923.

The second volume of Abt's Pediatrics fully justifies the expectations raised by the first. The twenty-three chapters of this volume consider such general subjects as the mortalities of infancy, history-taking, and physical examination, peculiarities of disease in childhood, and prophylaxis and treatment, as well as more specific subjects, such as the cerebrospinal fluid, roentgenology in pediatrics, and heliotherapy.

Many authorities would doubtlessly take exception to the use of the longitudinal sinus for transfusion as advocated by both De Buys in his chapter on prophylaxis and treatment, and Pearce in his discussion of diseases of the newborn. The principles employed in combating sepsis as outlined by De Buys are worthy of very general attention.

Julian H. Hess has written for this volume the chapter on premature infants, employing in general the same material used in his text-book on the subject. Both are of uniform excellence.

Perhaps the outstanding contribution to the volume is the chapter on the chemistry and biology of milk by Paul G. Heinemann, author of "Milk." Valuable information is here given on a subject of extreme importance in pediatrics, and one concerning which a vast amount of confusion exists.

The artificial feeding of infants is very clearly discussed by Joseph Brennemann. The historical part is interesting and the treatment of the subject is unusually tolerant. Of great importance is his championship of the boiling of milk in infant feeding, long a routine procedure on the Continent, almost exclusively employed by Jacobi in New York, but other than that largely disregarded for years in this country.

Other subjects included in this volume are breast-feeding, diabetes mellitus and insipidus, seasickness, beri-beri, acidosis, obesity, scurvy, pellagra, the constitutional diatheses, and acrodynia.

A Manual of the Practice of Medicine. Prepared especially for students. By A. A. Stevens, M.D., Professor of Applied Therapeutics in the University of Pennsylvania; Visiting Physician to the Philadelphia General Hospital. Eleventh edition, entirely reset. Philadelphia and London: W. B. Saunders Co., 1923. Pp. 620.

This little manual of the practice of medicine, especially for students, gives in a clear and concise manner the salient points of diagnosis and treatment of internal diseases and diseases of the skin.

The notes on general symptomatology in the first section of the book, though necessarily brief, are a valuable part of the volume.

In the section on urine examination (page 130) we find no mention of Benedict's test for sugar, so commonly used today. In the treatment of carbuncle (page 576) we should have liked to see the vaccine treatment mentioned, certainly a valuable method in certain cases, either used alone or in conjunction with operation.

The book is well written, of most convenient size, and should prove a valuable reference volume for physicians as well as students.

Hospital Corps Handbook, United States Navy, 1923. Published by the Bureau of Medicine and Surgery, under the authority of the Secretary of the Navy. Pp. 717. Price $1.00.

This text-book for Hospital Corps men contains a vast amount of information in very concise form. There are the elementary facts of anatomy and physiology, first aid and minor surgery, operating-room technique, anesthesia, physiotherapy, laboratory analyses, embalming, and hospital administration. The book is interesting, instructive, and very handy for reference. We would think it admirably adapted for its purpose.

Case Records
of the
Massachusetts General Hospital

ANTE-MORTEM AND POST-MORTEM RECORDS AS USED IN WEEKLY CLINICO-PATHOLOGICAL EXERCISES

EDITED BY
RICHARD C. CABOT, M.D., AND HUGH CABOT, M.D.
F. M. PAINTER, ASSISTANT EDITOR

CASE 10031

First entry. A widowed Irish cook of fifty-five entered March 4, eleven years before her final admission.

F. H. Unimportant.

P. H. Four years before admission she had an attack of acute stomach trouble lasting four days.

P. I. For seven years she had had pain just over the sternum, often quite troublesome. Four months ago she caught a slight cold and ever since had had some cough. Three weeks ago she caught fresh cold, could not breathe, and had grown steadily worse until now she coughed and wheezed day and night, and was unable to sleep.

P. E. Obese. Examination of *lungs* unsatisfactory on account of fat. Occasional coarse moist râles and a few bronchial and musical râles on expiration scattered over both backs and right front. *Heart* normal so far as could be made out. Just over the middle of the sternum at about the fourth cartilage was an area as large as a five-cent piece, exquisitely tender. *Abdomen, extremities, pupils* and *reflexes* normal.

T. 101°-98°. *P.* 100-73. *R.* 36-20. *Urine.* Cloudy, sp. gr. 1.026, the slightest possible trace of albumin, a few leucocytes and granular casts, an occasional red blood corpuscle. *Blood.* Leucocytes 10,100.

The patient developed acute and noisy delirium, considered delirium tremens. After March 8 she was rational and quiet. By March 10 there were no more signs of asthma. March 14 she was discharged.

Second entry. April 9, seven years after the first admission, she returned for treatment of ulcers of the legs.

P. I. Since the preceding Christmas she had had an itching rash on both legs up to the knees. Six weeks ago the first of the present ulcers appeared. She complained of burning and shooting pains in the feet and legs.

P. E. "The heart shows signs of a compensated mitral stenosis. The lungs show slight edema at the bases." Each leg just above the ankle showed four irregularly shaped ulcers with puckered, firm, slightly elevated but not undermined edges and depressed floors of dirty yellowish shiny viscid exudate. Just above the ankle an inflamed reddish band ran around each leg.

It was learned that the patient had had previous hospital treatment for syphilis. Examination of scrapings from the ulcers showed no spirochetes. Under treatment with anthrasol, lanolin, silver nitrate and other remedies the lesions were practically all healed by May 21 and the bands of redness much less marked. May 23 she was discharged.

Third entry. January 17, three and a half years after the last admission.

Additional P. H. She now mentioned an attack of pneumonia six years ago. She was, however, too ill to give a clear history.

P. I. Three weeks ago she began to feel weak and numb all over, and at times had prickling pains in the upper back. She became dyspneic and lost all appetite.

P. E. Fairly nourished. Glands not markedly enlarged. Apex impulse of the *heart* not found. Left border of dullness 12 cm. from the midsternum just outside the nipple line. Slight enlargement to the right. Increased retromanubrial dullness. Sounds rather distant, loudest in the fourth space, nipple line. First sound split. No murmurs. Action regular. Pulses of small volume. Systolic *B.P.* 110. Barrel chest. Expansion very poor. Deep breath impossible because of epigastric pain. *Lungs.* Hyperresonant except for slight dullness in the extreme left base, where there were diminished breathing and a few expiratory crackles. A few inspiratory crackles under the right clavicle. *Abdomen.* Obese. Marked resistance above the umbilicus (probably liver). Tympanitic except in the right flank and above the umbilicus. Liver from the fifth rib to level of umbilicus, where a hard rounded edge was felt descending with inspiration. Splenic dullness increased. Resistance in splenic area, but spleen not felt. *Pupils* and *knee-jerks* normal. *Extremities.* Old pigmented scars over shins. Slight edema of the ankles.

T. 96°-100.2°, with a terminal rise to 102.2°. *P.* 75-125. *R.* 23-46. *Urine.* ℥ 6-17. Sp. gr. 1.013-1.025. Cloudy at two of four examinations, alkaline at one, a slight trace to the slight-

est possible trace of albumin at two, a few red blood corpuscles and leucocytes at the last. *Blood.* Hgb. 80%, leucocytes 12,200, polynuclears 86%. *Stools* negative. *Sputum.* No tb. Pneumococci.

By January 22 the liver could be made out to be nodular. The patient now said she had "always had an epigastric mass." She gradually went downhill. She was mentally unbalanced, and by January 27 could not answer questions rationally. She slept hardly at all. She developed dyspnea and expiratory difficulty with an audible wheeze. The lungs gradually filled with mucous râles, and January 27 there was broncho-vesicular breathing over the left upper chest. Besides the hard liver edge a second mass was felt to the left of the midline which might have been spleen or a lobulated portion of the left lobe of the liver.

January 28 the patient died.

Discussion

by dr. richard c. cabot

notes on the history

All we can be sure of at this first entry is the delirium tremens, very possibly with acute or subacute bronchitis. About the tender spot on the sternum I have nothing to say. I do not know anything about it.

At the second entry she had the sort of eczema that precedes ulcers.

notes on the physical examination

At the third entry they did not find the evidence of mitral stenosis which someone found the time before.

This time she came in for dyspnea apparently, but they have not found any cause for it in the heart or lungs.

There is nothing significant in the urine.

We have not heard before that the liver was large.

The physical examination gives us nothing as far as I can see. I do not know what is the matter or why she came in.

differential diagnosis

The liver comes very much into the foreground at the end of the case, having had much less said about it before. I have no doubt that the diagnosis of emphysema was also wrongly made, as I certainly would have made it until comparatively recent years, on the basis of the barrel chest, the hyperresonance and the squeaks. But I do not think anybody could have said that could possibly have killed her. I will venture to say that their main diagnosis concerned the liver, as I think it should. I cannot see, without supposing some disease of the liver, how we are going to explain the death.

Going back over the whole case: at the first entry we had evidence of delirium tremens and not much of anything else. The second time we thought there was mitral stenosis, but it was not found the third time; nothing was found but varicose ulcers. So in the past history I see nothing but delirium tremens, which could of course bear on the diagnosis of alcoholic cirrhosis, which must be considered possible, since something like an enlarged spleen is found on the other side, and splenic enlargement is a confirmation of any diagnosis of hepatic cirrhosis.

If she did not die of cirrhosis of the liver I don't know what she did die of. But it is not at all a satisfactory picture of that disease. We have no ascites or other evidence of portal stasis, unless the spleen may be taken as such. The cirrhotic liver is not felt to be nodular before death; that is, the nodules are not distinct enough to be felt during life, although after death with the liver in the hand they are easily felt. Nodules felt during life are usually cancerous, sometimes syphilitic.

Let us take cancer. She has had no stomach symptoms. Most liver cancers are secondary to cancer of the stomach. She has had no jaundice, which is common. She is fairly nourished, which is queer for cancer; and she has had no pain. We have no suggestion of any other place in the body where a neoplasm could be primary.

Miss Painter: It is mentioned at the beginning of the third entry that she was evidently mentally senile.

Dr. Cabot: The history may, therefore, have been all wrong; there may be more on the side of cancer than we have here.

Syphilis of the liver, it seems to me, cannot be ruled out. It may give a nodular liver, appreciable as such during life. She has a history with which it might well go, although we have no definite evidence of syphilis. But I never knew anybody to die of syphilis of the liver, and that rather prevents me from making that as anything but a subordinate diagnosis. It is perfectly possible, I suppose, to have a syphilitic cirrhosis, and if enough of the liver substance was destroyed to cause death by hepatic toxemia we should be able thus to account for the death. Most cases of syphilis of the liver that I have seen have not destroyed much of the liver substance, and therefore have been a subordinate element, the patient dying of something else.

On the whole, then, it seems to me more like cirrhosis, either syphilitic or non-syphilitic, than anything else that I can think of. She certainly did not die of mitral stenosis, though she may have had mitral stenosis. At one entry they thought she had, but she had very little passive

congestion. She certainly did not die of emphysema, though she may have had it. My guess is that she did not have it. So the best I can say is that she died of cirrhosis of the liver, with presumably some arteriosclerosis and a big spleen, and I do not know of anything else.

A PHYSICIAN: When do you and when do you not have ascites in cirrhosis?

DR. CABOT: There is no answer that I know that can be given to that question. We have it in probably sixty per cent. of the cases. If you ask why we have it in some and not in other cases, I do not believe anybody can answer. It has often been said, as H. D. Rolleston says, that there is a "compensated" and an "uncompensated" cirrhosis. For a time the collateral circulation takes care of things and no ascites appears. Then the disease progresses beyond the point at which the collateral circulation can take care of it, and ascites appears. But we see cases with almost no liver left and yet no ascites. We can hardly say, therefore, that it is a question of degree. Some of the smallest livers I have ever seen have been without ascites.

DR. YOUNG: We even get fatal cases without either ascites or a changed circulation in the large veins that are visible on the abdomen. The compensation has taken place in other places, inside, so that we do not see it.

DR. CABOT: I remember Sir William Osler's account of an old nurse in a hospital where he had been a great many years. She had seemed perfectly well up to a few days before her death, then became drowsy and died, and they found a very small cirrhotic liver. It was apparently a hepatic toxemia with nothing to show for it on the outside. He emphasized what a long, non-symptomatic, silent course the average case of cirrhosis has. We see only the terminal symptoms and sometimes not even those. I do not feel at all sure that this is cirrhosis of the liver, but as I have said, I cannot think of anything else that fits the case any better.

A PHYSICIAN: What can that tender mass be which they felt at the first admission?

DR. CABOT: It was a tender spot apparently. I commented on it at the time and said that I have no idea. Nothing comes of it in eleven years' observation. I think we shall probably never know what that was.

A PHYSICIAN: Can you get by tests any evidence of hepatic insufficiency?

DR. CABOT: I do not know enough to answer that question. There have been a number of tests for hepatic insufficiency brought in from time to time, especially by Rowntree and by Whipple and his pupils in California, but I have not seen enough of their application to know whether they are really of any use.

A STUDENT: I heard Dr. Chester Jones discuss that the other night. He summed it up by saying that (1) the tests were negative unless there was such a gross hepatic lesion that one could not fail to notice it by other methods, or else (2) they were in some other way unsatisfactory. They were either too delicate or not delicate enough.

DR. CABOT: That is good testimony on the subject. I guess we can accept that as summing it up up to date.

DR. RICHARDSON: Was there no fever in this case?

DR. CABOT: In the final entry.

CLINICAL DIAGNOSIS (FROM HOSPITAL RECORD)

Chronic alcoholism.
Alcoholic dementia.
Enlarged liver (fat or cancer).
Emphysema.
Bronchiectasis.
Terminal pneumonia.

DR. RICHARD C. CABOT'S DIAGNOSIS

Chronic interstitial hepatitis.
Arteriosclerosis.

ANATOMICAL DIAGNOSIS

1. *Primary fatal lesions*

Neurocytoma(?) of the stomach.
Extensive metastases in the retroperitoneal lymphatic glands and liver.

2. *Secondary or terminal lesions*

Lobar pneumonia, double.
Arteriosclerosis.
Fatty infiltration and fatty degeneration of the myocardium.
Chronic nephritis, arteriosclerotic.
Hypertrophy and dilatation of the heart.
Edema piae.

3. *Historical landmarks*

Chronic pleuritis, left.
Chronic pelvic peritonitis.
Cholelithiasis.

DR. RICHARDSON: This woman was well nourished. It is important to note that point.

The examination of the head showed a wet pia and a few patches of sclerosis along the vessels of Willis, but was otherwise negative.

The abdomen was distended, and through the abdominal wall a large mass was felt which seemed to be the liver and was the liver, plus something else to be mentioned. The peritoneal cavity contained a small amount of thin pale fluid.

The margin of the liver was sixteen cm. below the ensiform cartilage in the median line, and the anterior margin of the left lobe nine cm. below the costal border in the left mam-

mary line. The diaphragm on the right was at the fourth rib, and on the left at the upper border of the fifth rib. There was a small amount of reddish cloudy fluid in the right pleural cavity, none in the left.

The right lung was free. The left was bound down by old adhesions in places. The trachea and bronchi showed a red mucosa and contained a moderate amount of mucopurulent material. The bronchial glands were negative. About half the upper lobe of the right lung showed frank gray lobar pneumonia. The lower lobe of the left lung in the upper part showed another extensive area of lobar pneumonia. No emphysema was made out.

The heart weighed 355 grams,—slightly enlarged. There was some arteriosclerosis present, mostly in the abdominal portion of the aorta, and one plaque in the ascending thoracic portion which there was a little question about. A piece was examined, and turned out to be arteriosclerotic. So there was a moderate amount of arteriosclerosis.

The liver weighed 3575 grams and was riddled with tumor tissue which presented on the surface in the form of large bosses, and larger and smaller masses were scattered all through the substance of the organ.

There were four stones in the gall-bladder, but the mucosa was negative and the bile-ducts free. The pancreas and duct of Wirsung were out of the picture. The spleen weighed 125 grams, rather small, a little fibrous thickening of the caspule, and the follicles were prominent, but it was practically negative.

The kidneys weighed 216 grams, the capsules were slightly adherent, the tissues rather tough, the markings rather indistinct. The whole organ presented the appearance of a moderate amount of arteriosclerotic nephritis. The pelves, ureters, bladder, the uterus and tubes were negative.

The esophagus was negative, but the stomach in the region of its anterior wall extending between the curvatures presented a large flattened mass of new-growth tissue. This mass began at a point about six cm. below the end of the esophagus and extended downward to within about ten cm. of the pylorus. The pylorus and mucosa outside of this growth were negative. The mass of new growth on the inside presented several areas of ulceration, but these remained within the wall of the stomach. There was no evidence of perforation. The new growth tissue in the liver and in the stomach was more or less continuous with a large mass of new growth in the situation of the retroperitoneal glands. Altogether this formed the mass that could be felt through the abdominal wall.

The microscopic examination of the tissue is of considerable interest, because Dr. Wright thinks that the tumor in this particular case is probably neurocytoma.

CASE 10032

An American girl baby ten months old entered September 28, 1923. The complaint was vomiting of three weeks' duration.

F. H. Her mother's first and last pregnancies ended in miscarriages. A great aunt was insane.

P. H. She was normally delivered at full term, weighing eight and three-quarters pounds at birth. She was breast fed three months, then put on imperial granum, milk, water and cane sugar. She sat up in six months. She had been well except for a recurrent blotchy skin eruption at intervals. At entrance she could not stand and had no teeth.

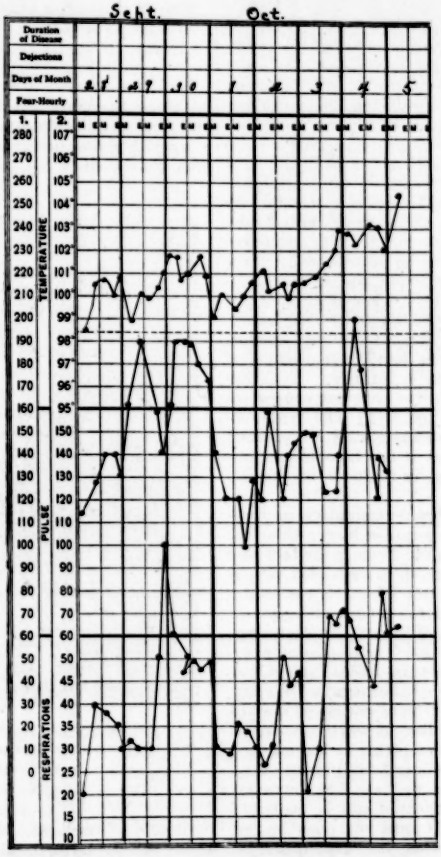
P. I. Three weeks before admission she was left alone out-of-doors a little while. When found she had a pebble in her mouth and one in her hand. That night she vomited once, curdled milk. During the following week she seemed fairly well except for occasional vomiting. For the past two weeks she had had forceful vomiting after each meal, had become fretful, and seemed tender to touch. For the past five days she had become very drowsy and had lost weight. For three weeks her bowels had been more constipated than usual. September 24 she passed something in the stool that looked like flesh. She had had four or five "spasms" of the extremities lately. The night before admission she had a severe spasm requiring chloroform for relaxation.

P. E. A well nourished baby, semicomatose, with flushed cheeks. Left ear drum slightly injected in the postero-superior portion. Right internal strabismus. Throat slightly injected. *Heart, lungs* and *abdomen* negative. *Extremities.* Hands clenched firmly. Moderate tremor. *Pupils.* Left slightly larger than right. Reactions of both to light sluggish. *Reflexes.* Knee-jerks normal. No Kernig. Brudzinski present.

T., P. and *R.* as shown in the chart. *Urine.* Sp. gr. not learned (insufficient quantity). Alkaline at one of two examinations, the slightest possible trace of albumin at one, occasional leucocytes at one. *Blood.* Hgb. 70 per cent., leucocytes 25,400, polynuclears 77 per cent., tendency toward youthful type; reds normal. *Stools* negative. *Lumbar puncture* September 28, 9 a. m., 18 c.c. clear fluid under moderately increased pressure. 75 cells. Globulin positive. Protein normal. September 28, 11 p. m., (therapeutic puncture.) 15 c.c. clear fluid under no pressure. October 1, 18 c.c. clear fluid under increased pressure. October 2, 20 c. c. clear fluid under increased pressure. Wassermann and gold solution negative. Total protein 91. Sugar

0.054. October 4, 30 c.c. slightly cloudy fluid under increased pressure.

Orders. September 28. Force fluids. Boiled milk diet. Castor oil 3 teaspoonfuls. Morphia gr. 1/80 s.c. once for convulsions. Individual precautions. Irrigate eyes with warm boric. September 30. Warm saline irrigations both



ears every four hours. October 2. Hot saline irrigations both ears every three hours. October 4. Potassium boro-tartrate gr. v; six such powders. One powder dissolved in a little lukewarm water 2 i. d.

September 29 450 c.c. of saline was given intraperitoneally. September 30 slight lagging of the right angle of the mouth was noted. The ear drums were normal. October 1 the baby was more stuporous, refused a night feeding, and showed slight turgor. From eleven to twelve o'clock that night she had a continuous convulsion, followed at twelve by profuse perspiration with labored and irregular respirations. After a lumbar puncture she was quiet for the rest of the night. The following afternoon similar symptoms were again relieved in the same way. She had atypical Cheyne-Stokes breathing at intervals during that day. During the next two days she was in coma, and seemed to grow steadily worse. October 2 500 c.c. of saline was given intraperitoneally. The afternoon of October 4 she had two convulsions, somewhat relieved by lumbar punctures, and that evening a third. A third puncture gave 30 c.c. of slightly cloudy fluid. The respirations in the early evening were rapid

and difficult, and there were râles throughout the chest. She lay very quietly all night, becoming very stiff when disturbed. Early the morning of October 5 she died.

Discussion

BY DR. FRITZ B. TALBOT

The history of vomiting is the outstanding feature of this case. The character of the vomiting at first attracted little attention, but as it became worse it became forceful. If the symptom of vomiting alone were taken into consideration, the following causes should be ruled out. (1) Indigestion. The history of putting a stone in her mouth and of passing something by stool which looked like flesh at first sight might be suggestive. When indigestible materials are eaten, however, the symptoms are usually acute, and instead of increasing in severity, decrease. Vomiting due to indigestion is practically never forceful. (2) Recurrent vomiting (cyclic vomiting) may be forceful, but it comes at intervals between which there is no digestive disturbance. It never comes at this age. (3) Pyloric stenosis and spasm, on the other hand, are diseases of the newborn or of early infancy. Vomiting from these causes hardly ever commences as late as ten months of age. (4) The symptom, however, may be due to increasing intracranial pressure. The fact that it has become progressively more pronounced is in favor of this explanation.

Evidence in the physical examination confirms this assumption. One pupil is larger than the other. There is strabismus. Despite the fact that there is no Kernig sign, the Brudzinski sign is positive. The cell count of 75 is also consistent.

The diagnosis, therefore, is some infection of the cerebrospinal canal. The long duration practically rules out infections with pyogenic organisms such as the pneumococcus, streptococcus, and meningococcus. The negative Wassermann is against syphilis. The course of the disease is against encephalitis, in which one would expect the most acute symptoms at the onset.

The history and the clinical findings are typical of tuberculous meningitis. The leucocyte count and the differential count may be explained by the otitis media. Toward the end Cheyne-Stokes breathing confirms the assumption of intracranial pressure. The diagnosis of tuberculous meningitis with otitis media is therefore made on clinical evidence. The skin tuberculin is not recorded, and although there is no positive laboratory evidence of this diagnosis the other evidence is very much in its favor.

Clinical diagnosis (from hospital record)

Tuberculous meningitis.
Bronchopneumonia.

Dr. Fritz B. Talbot's diagnosis

Tuberculous meningitis.
Otitis media.

Anatomical diagnosis

Tuberculous meningitis.
Tuberculosis of a mesenteric gland.
Miliary tuberculosis of the spleen, liver and lung.

Dr. Richardson: The pia along the medulla, up along the pons, out the fissures of Sylvius, and between the frontal lobes showed a layer of grayish-yellow diffuse exudate, in places granular, which stuck the lobes together. On the

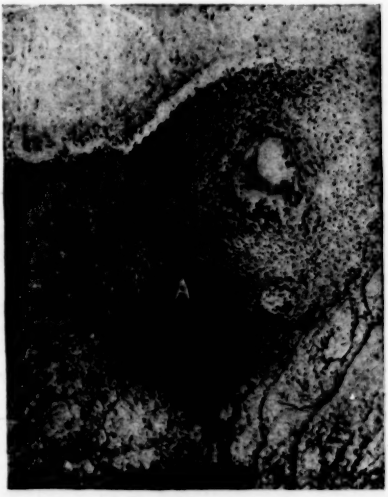


Plate I.—Sections from the pia in Case 10032, showing exudate in tuberculous meningitis. Mass of tubercle bacilli at A. × 500.

Dr. William H. Smith.

Photomicrograph by Dr. Albert E. Steele.

right side of the brain between the corpus callosum and the mesial aspect of the right frontal lobe there was a granular area which was reddened and over which rested a small collection of blood clot. The vessels of Willis, sinuses, middle ears and the pineal and pituitary glands were negative. The ventricles showed no definite excess of fluid, but the choroid plexuses were dirty red and roughened. The brain weighed 865 grams. The tissue was rather wet, but otherwise negative. The pia along the spinal cord was somewhat reddened and roughened. The gray matter was a little redder than usual.

The skin and mucous membranes were very pale. The subcutaneous fat was in fair amount and the muscles were negative. There was no fluid in the peritoneal cavity. On the peritoneum in several places there were small hemorrhagic areas.

The appendix was negative. The esophagus, stomach and pylorus were negative, as were the intestines.

The mesenteric glands generally were negative, but there was one enlarged gland 2 cm. in diameter which showed marked caseous degeneration. The retroperitoneal glands were negative.

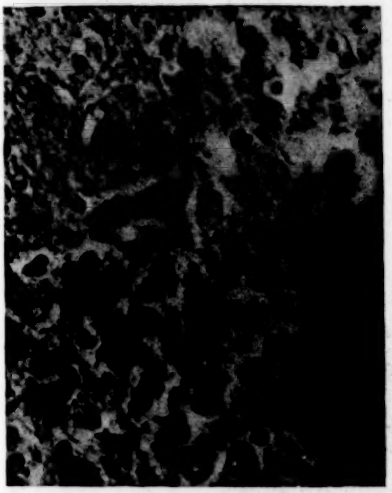


PLATE II.—Higher magnification of exudate at A in Plate I, showing tubercles in exudate. × 1500.

DR. WILLIAM H. SMITH.
Photomicrograph by Dr. Albert E. Steele.

The apices of the lungs were negative. There were no areas of consolidation. Macroscopically the tissue generally was pink and spongy and in a few places there were minute hemorrhagic areas. No definite tubercles were made out macroscopically, but microscopically there were a few tubercles.

The heart and circulatory apparatus generally were negative.

Macroscopically there were no definite tubercles made out in the liver, but in the sections one tubercle was found. The spleen showed no definite enlargement, but the surface of the organ showed many scattered tubercle-like nodules. In the substance tubercle-like nodules were seen here and there.

A well marked case of tuberculous meningitis extending down along the cord, with some miliary tuberculosis of the spleen, liver and lung, and tuberculosis of a mesenteric gland.

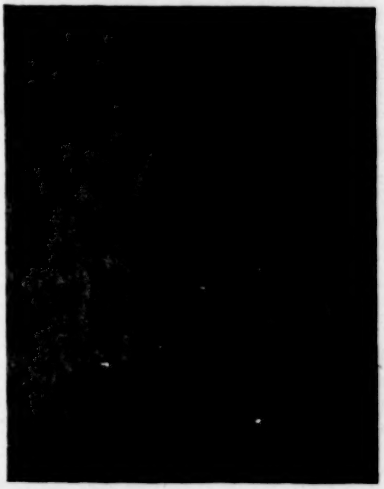


PLATE III.—Tubercle bacilli in exudate in Case 10032. × 2000.

DR. WILLIAM H. SMITH.
Photomicrograph by Dr. Albert E. Steele.

NOTE BY DR. TALBOT

This case is an example which can be taken as evidence in favor of gastro-intestinal infection, probably of bovine origin. The caseous mesenteric gland was apparently older than any lesion in the lungs. In infancy tuberculous infection is less often localized than in later childhood, and when it escapes into the blood stream it usually becomes meningitis and miliary tuberculosis. I cannot remember seeing any case of tuberculous meningitis which was localized in the nervous system alone.

The lesson that such a case as this teaches is prevention of infection in children, especially during infancy. It is due to fear of such infections that cows' milk is generally either pasteurized or sterilized today, while a decade ago it was used almost entirely in the raw state in this city.

CASE 10033

An English janitor of fifty-seven entered December 26 complaining of loss of weight.

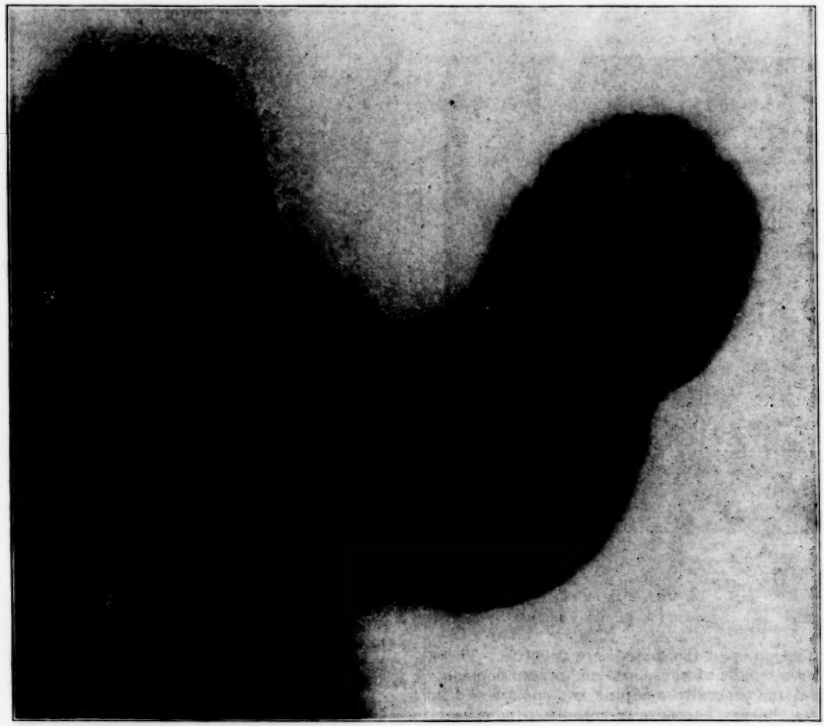
F. H. Unimportant.

P. H. Negative except for an injury to his

leg with operation thirty-seven years ago, and nycturia 2-3.

P. I. Two years before admission he had dull pain in the epigastrium about an hour after meals lasting two hours, not relieved by food. He was afraid to eat on account of pain. After six months of this he was treated in a hospital with milk diet. After a week the pain disappeared. It returned however after he left the hospital and went back to solid food. After a physician treated him with castor oil the pain disappeared and did not return. During the past few months he had had several attacks of dizziness, and felt as though the blood rushed to his head. Three months ago he began to lose weight. November 27, after having lost thirty-six pounds, he came to the Out-Patient Department. For the six weeks before admission to the wards he had had continuous dull pain in the lower back extending half way up the back, not affected by movement. There was tenderness to touch just below the ensiform, but no pain in that region. Three weeks before admission he had one or two sharp attacks of pain in the back, relieved by turpentine stupes.

Records of the Out-Patient Department. Examination showed a tender point just below the ensiform; no tender points in the back except over the sacroiliac articulation. Wassermann negative. X-ray. The stomach contained a large residue of the meal at six hours. Peristalsis was sluggish, an occasional deep wave being seen. The tone was poor. The extreme pyloric end of the stomach showed a small area of irregularity.



The stomach contained a large residue of the meal at six hours. The extreme pyloric end of the stomach showed a small area of irregularity.

P. E. A fairly well developed man showing evidence of loss of weight. *Heart* and *lungs* not remarkable. *Abdomen* protuberant, pendulous, soft; definite tenderness with slight resistance in the epigastrium; no masses. *Genitals, extremities, pupils* and *reflexes* normal.

Before operation *chart* normal; *urine*, sp. gr.

1.010, 3-5 leucocytes per high power field; *blood*, hgb. 70 per cent., leucocytes 7,400, polynuclears 69 per cent., reds normal. *Wassermann* negative. *Gastric analysis. Fasting contents*, 80 c.c. of reddish-brown material. Guaiac negative. A few leucocytes, a moderate amount of mucus, a few squamous cells. Free HCl 33/100 c.c. Total acid 44/100 c.c. *Test meal.* 105 c.c. of white material. Guaiac negative. A large amount of starch, a few squamous cells. Free HCl 38/100 c.c. Total acid 63/100 c.c. *X-ray.* Appearance of proliferation and slight roughening of the margins of the vertebrae suggesting an arthritic process. No definite abnormality in the sacroiliac region.

The patient's condition, its prognosis, and the possibilities of treatment were thoroughly discussed with him. He decided in favor of operation. December 28 it was performed. Next day his general condition was good. He was nauseated and vomited December 30. A stomach wash produced two quarts of greenish fluid. He continued to have nausea and vomiting. The next day the stomach was washed twice, both times with the production of gas and greenish fluid followed by relief.

The night of December 31 there was moderate distention. About midnight the pulse suddenly rose to 120. Next morning there was great distention. The patient was cyanotic and sweating, with intense abdominal pain, not relieved by enemata, poultices or pituitrin.

January 1 a second operation was done. The general condition of the patient was poor throughout the rest of the day. He grew gradually worse during the night and died at noon January 2.

Discussion

BY DR. EDWARD L. YOUNG, JR.

This is a man in whom we have to differentiate between functional digestive trouble and organic lesion. He is in the cancer age. He comes in for loss of weight which has extended over six months and is very considerable. In these cases we always have to bear in mind that a very large loss of weight can come because of lack of nutrition due to the patient's fear of eating, or from lack of nutrition due to the fact that there is a block at the pyloric end of the stomach from ulcer or cancer and food is vomited without much absorption. Here we have not enough record to tell us whether the lack of nutrition might come from lack of intake or from lack of absorption. He had, two years ago, pain coming on at a definite time after meals, lasting for two hours, and pain that was very severe because it made him afraid to eat. It was helped by milk diet and returned on solid food. Then it disappeared again. I should doubt somewhat whether the relation between the relief of pain and castor oil was very great. Then comes on the loss of weight.

We have evidence enough here to say that there is an organic lesion. We do not know enough about vomiting to say whether or not there is any obstruction. The only thing to do is to see what help the x-ray will give us.

Loss of weight in a man of cancer age with this story points a little more to cancer perhaps, whereas the type of pain seems to me more suggestive of ulcer.

Dr. Merrill, will you discuss the x-ray examination?

Dr. Merrill: There is a relatively small group of gastric cases in which we are able to make a fairly positive diagnosis up to a certain point. In this man we were pretty confident in diagnosing an obstructive lesion involving the pylorus. The two principal lesions we have to bear in mind of course are pyloric ulcer and a small malignant lesion of limited extent. We recently have been interested in finding one or two cases which we have thought syphilitic, but as a general thing the diagnosis lies between these two. In a few of the cases it cannot be made positively by the x-ray examination, and we have to take into consideration the clinical side of the story more or less. In this case I was somewhat misled by our story. We do not get the clinical history with the patient, and the only story we have is a few notes made by a nurse. And from the character of the histories in general I am afraid that history-taking does not form a very large part of the nurse's education. Our history begins three months ago with stomach trouble. During that three months he has lost thirty-six pounds, and he is a man of fifty-seven years. So feeling pretty sure that he had a pyloric obstruction I said, more probably cancer than ulcer. One other point influenced me; that was the character of the peristalsis. As a general rule in ulcer, inflammatory lesions of the stomach or duodenum, peristalsis is exaggerated by the irritation probably, and in malignant disease of the stomach peristalsis is more quiet. In cases of pyloric obstruction accompanied by dilatation and loss of tone the stomach muscle seems to have got tired out perhaps, and the peristalsis in the presence of an obstructing ulcer may be quiet. At six hours this patient had a large residue in his stomach of approximately two-thirds of the meal. The extreme pyloric area of the stomach was slightly irregular; very little passed through into the duodenum, not enough to give us a shadow of it. The peristalsis was sluggish, at times showing a deep wave or series of waves suggesting obstruction. So we concluded that there was a definite lesion at the pylorus with considerable obstruction; and from the general appearances and our misleading history, the man's age, and other things, we thought that it was more probably malignant

than ulcer. We cannot tell from the picture which.

DR. YOUNG: Would you be able to say definitely on which side of the pylorus that lesion was?

DR. MERRILL: No.

DR. YOUNG: Up to this point—up to what Dr. Merrill said, it seemed to me that the argument was very much in favor of cancer. Is there any more history of vomiting than is given here? Because from the x-ray picture of obstruction we should expect that this man would have vomited more than we are led to think.

DR. CABOT: There is a flat-footed statement, "no nausea, no vomiting,"—perfectly definite.

DR. YOUNG: I assume that this x-ray was taken with a question of metastasis from a malignant process. We are not given any other reason.

DR. MERRILL: It was because of the pain in the back. That was a large part of the complaint, I think.

DR. YOUNG: Let us sum up the two bodies of evidence. A man in the cancer age, with a very considerable loss of weight, a story going back two years, perhaps a little longer than the cancer story generally goes—

DR. RICHARDSON: How do they establish the loss of weight?

DR. YOUNG: On the man's evidence only. But he is very specific. He says thirty-six pounds, so that he must have some reason on which to base it.—An x-ray which shows obstruction: sluggish peristalsis. Those are the things more suggestive of cancer. On the other hand the chemical analysis of the stomach contents, the very definite type of pain, if we can believe it, coming on at a very definite time after eating, and symptoms relieved by the milk diet, are more suggestive of ulcer. Now the lack of guaiac test in the stomach contents; if there is a lesion on the pyloric side of the stomach intensive enough to have caused the obstruction shown in the x-ray, it should have shown a positive guaiac. Of course with one examination that is of no great value. Then Dr. Merrill's statement that they could not be sure on that x-ray that the obstruction might not be on the duodenal side makes me wonder whether this is ulcer. Were it not for the suggestion that Dr. Merrill gives us I think I should vote for cancer.

DR. MERRILL: When you asked me which side, I was thinking of anterior and posterior.

DR. YOUNG: I meant duodenal or gastric.

DR. MERRILL: There often is a slight irregularity on the extreme pyloric end of the stomach if it is on that side, and if it is in the duodenum the pyloric end of the stomach will often fill out with a rounder and fuller outline, suggesting that the stomach is not involved. As I have stated, it is probably very close to the pylorus, if anything on the gastric side; but I should call it pyloric—involving the pylorus.

DR. YOUNG: So as I thought of this I should put cancer down six out of ten and ulcer four chances out of ten, but go prepared to meet either condition that I should find. I should be very hesitant with this story about telling the patient that there was a cancer.

DR. MERRILL: Was there a story of blood in the stools?

MISS PAINTER: There was a stool examination which was negative.

DR. YOUNG: I should not be at all surprised to find not only ulcer but ulcer of the duodenum. I do not see that we have at all ruled it out.

Gastric or duodenal, Dr. Cabot?

DR. CABOT: I think nobody can tell. I cannot, and I never try.

DR. YOUNG'S PRE-OPERATIVE DIAGNOSIS

1. Carcinoma of the stomach.
2. Peptic ulcer.

PRE-OPERATIVE DIAGNOSIS DECEMBER 28

Carcinoma of the stomach.

FIRST OPERATION

Gas and ether. Five inch median epigastric incision. The stomach was distinctly dilated, but the most careful examination failed to show anything wrong with the stomach, the pylorus or the duodenum. The pyloric ring was normal in size and smooth. It seemed that this dilatation was probably due to ptosis and not to the organic lesion that was suspected. The gall-bladder, both kidneys and the intestines were normal. The appendix was long, adherent, kinked, and bound down to the brim of the pelvis; very clearly the source of chronic inflammation. The appendix was removed with some difficulty and the stump buried. The wound was closed in layers.

PATHOLOGICAL REPORT

A string-like appendix 9 cm. long. Its lumen is patent.

Chronic appendicitis.

H. F. HARTWELL.

FURTHER DISCUSSION

There is no such thing as primary chronic appendicitis. I am going to stick to it that this man has a lesion of the pylorus.

DR. CABOT: Do we ever get such dilatation due to ptosis?

DR. MERRILL: Occasionally we see a ptotic stomach which looks very large,—especially when accompanied by atony,—and fills with a

large shadow; but I think that gives a very different picture. This was not a ptotic stomach; measuring as we see the patient standing up the height of the lower pole as compared with the crest of the ilium, for example, it was not what we call a ptotic stomach.

DR. YOUNG: I think it is only in extreme cases that we get any stomach obstruction in ptosis.

DR. CABOT: That is an "orthopedic lesion."

DR. YOUNG: Believing as I do that chronic appendicitis never exists as in this case, I am going to insist that the surgeon missed a lesion at the pylorus. Believing that it is easier to discover a lesion on the gastric side, I am going to say ulcer of the duodenum.

A PHYSICIAN: How about a liver lesion?

DR. YOUNG: They should have discovered a carcinoma of the liver and of the pancreas, because of symptoms in the biliary tract as obstruction in the common duct. So I do not see how that can be considered.

The condition on December 31 spells peritonitis. There is obstruction there. Whether that obstruction is due to peritonitis or whether there is a kink or volvulus I do not know.

DR. YOUNG'S PRE-OPERATIVE DIAGNOSIS

Intestinal obstruction.
General peritonitis.

PRE-OPERATIVE DIAGNOSIS JANUARY 1

Intestinal obstruction.
General peritonitis.

SECOND OPERATION

Gas-oxygen. Five inch incision below the umbilicus in midline. On opening the peritoneum there was much gas and a small amount of turbid fluid. Careful examination failed to reveal the active cause of the peritonitis. A catheter was sewed into the loop of small intestine which presented in the wound. One cigarette drain to the abdominal cavity.

FURTHER DISCUSSION

I am going to say he has a perforated duodenal ulcer. I did not see where the gas could come from other than from perforation.

DR. MERRILL: Assuming that there was an overlooked ulcer in that neighborhood, would the previous operation and exploration have any relation to possible perforation two or three days later?

DR. YOUNG: I suppose it would depend on how roughly that was handled. I should think it would be pure guesswork.

DR. CABOT: Did they drain him?

DR. YOUNG: Not the first time.

A PHYSICIAN: A condition that would be likely to perforate in two or three days,—wouldn't the condition be such as to be fairly easily recognized?

DR. YOUNG: Dr. Richardson has found a number of times an ulcer overlooked, so much indurated that one would think nobody could overlook it. So on that basis I think any surgeon can overlook an ulcer that ought to be felt, or can feel an ulcer that is not there. I have seen both of those things.

CLINICAL DIAGNOSIS (FROM HOSPITAL RECORD)

General peritonitis.
Chronic dilatation of the stomach.
Chronic appendicitis.
Exploratory laparotomy, appendectomy.
Laparotomy with drainage for general peritonitis.

DR. EDWARD L. YOUNG'S DIAGNOSIS

Ulcer of the duodenum with perforation.

ANATOMICAL DIAGNOSIS

1. *Primary fatal lesions*

Ulcer of the duodenum with perforation.

2. *Secondary or terminal lesions*

General fibrinopurulent peritonitis.

3. *Historical landmarks*

Laparotomy.
Appendectomy.
Slight chronic pleuritis, left.
Hemorrhagic edema of the lungs.
Cyst of left kidney.

DR. RICHARDSON: There were the operation wounds mentioned. The abdomen was not distended. The wall yielded, but the peritoneal cavity presented a universal fibrinopurulent peritonitis. The stomach was normal; but just below and about at the pylorus—in fact the upper margin of the ulcer was formed by the lower margin of the pylorus—on the right posterior lateral wall was an ulcer twelve by twelve mm., with rounded margins descending to a smooth grayish base, and in that base was a perforation involving about half of it. On the peritoneal side there were some old adhesions. Sometimes these ulcers are tucked away in such a fashion that they are really pretty difficult to find.

A PHYSICIAN: With all that adhesion would you expect it to be found?

DR. YOUNG: If they were obvious that should give us a hint of trouble.

DR. CABOT: Don't you think the important

lesson here, Dr. Young, is that the surgeon should have known that he had not found the trouble? There was more there, if he had studied the whole history, than he could account for at the operation.

DR. YOUNG: Yes. I think that the story there and the x-ray picture were enough evidence so that he ought not to have let it go with "chronic appendix."

DR. CABOT: What about opening the duodenum to look in? Is that a thing you do?

DR. YOUNG: No. I think they ought to have had more faith in their preliminary studies, and I think that is true of a good many other surgical conditions—that rather than do an exploratory, which is a poor operation unless we are forced into it, suspicious gall-bladder lesions, for instance, or stomach lesions, or doubtful appendicitis had better be watched until we make up our minds that it is that disease; then go in and take out the gall-bladder, for instance. Even though the gall-bladder may feel normal, if after competent study and long enough time to establish the fact that there is something there, even then if we find a normal feeling gall-bladder, take it out.

A PHYSICIAN: Did that pylorus show stenosis?

DR. RICHARDSON: Not stenosis like that of the valves in the heart. The adhesions looped up one side of the duodenal wall; and the upper margin of the ulcer being the lower margin of the pylorus, the two things together would constrict the pylorus to some extent.

Current Literature Department

ABSTRACTORS

GERARDO M. BALBONI — CHESTER M. JONES
WILLIAM B. BREED — CHARLES D. LAWRENCE
LAURENCE D. CHAPIN — TRACY MALLORY
AUSTIN W. CHEEVER — HERMAN A. OSGOOD
RANDALL CLIFFORD — FRANCIS W. PALFREY
ISADOR CORIAT — EDWARD H. RISLEY
ERNEST M. DALAND — GEORGE C. SHATTUCK
MAURICE FREMONT-SMITH — WILLIAM H. SHEDDEN
HORACE GRAY — WARREN R. SISSON
ROBERT M. GREEN — GEORGE G. SMITH
JOHN B. HAWES, 2D. — WILDER TILESTON
JOHN S. HODGSON — HENRY R. VIETS
FRED S. HOPKINS — BRYANT D. WETHERELL

THE SURGICAL PATHOLOGY OF ACUTE AND CHRONIC EPIDIDYMITIS

KRETSCHMER, H. L., AND ALEXANDER, J. C. (*Jour. of Urology*, Nov., 1923), state that the indications which they have followed for operating on cases of acute epididymitis are: (1) Failure of rest, applications of large hot wet dressings, support of the parts, and the use of hot Sitz baths: (2) Presence of pus, that is, if upon admission to the hospital fluctuation can be demonstrated, showing clearly the presence of an abscess, operation is carried out immediately. (3) If pain persists or increases, if the swelling increases, and if the patient's leucocyte count is high or increases during the time he is under observation, surgical treatment is advised. The cases of chronic epididymitis included in this series that were treated surgically, were operated upon chiefly because of the persistence of pain and because of the presence of a hard, thickened, tender epididymis.

[B. D. W.]

THE RELATION OF THE SCHOOL TO THE MENTAL HEALTH OF THE AVERAGE CHILD

TAFT, JESSIE (*Mental Hygiene*, Oct., 1923). The author lays stress on the advantages of teaching mental hygiene in the school to the average as well as the sub-normal, psychopathic or delinquent child. Homes are too inaccessible. The ideas expressed in the paper are consistent with those of the general mental hygiene movement as advanced by the National Committee for Mental Hygiene. [H. R. V.]

SURGICAL PATHOLOGY OF THE SEMINAL VESICLES

DILLON, J. R., AND BLAISDELL, F. E. (*Jour. of Urology*, Nov., 1923), write that a broader knowledge of the symptoms and signs of the various conditions of the histology and pathology of the seminal vesicles and perivesicular tissues will better guide us in the treatment of vesiculitis. Vasotomy and injection, and dilatation of the ejaculatory ducts undoubtedly offer an important aid in diagnosis and treatment upon patients properly selected as to their condition at the time and the technique used. Owing to the impossibility of incising and draining all the infected diverticula or recesses of a seminal vesiculitis, in patients not amenable to non-operative measures, it is better to do a vesiculectomy in preference to a vesiculotomy.

[B. D. W.]

CONCENTRATING THE CELLS AND BACTERIA IN PROSTATIC SECRETION

WALTHER, H. W. E. (*Jour. of Urology*, Nov., 1923), reports that prostatic secretion can be more satisfactorily reported by concentrating the cells and bacteria by centrifuging for one minute in tube and extracting with a platinum loop.

[B. D. W.]

THE CAUSATIVE ORGANISMS AND THE EFFECT OF AUTOGENOUS VACCINES ON CASES OF CHRONIC PROSTATITIS

PLAYER, L. P., LEE-BROWN, R. K., AND MATHE, C. P. (*Jour. of Urology*, Nov., 1923), state that in cases of long-standing chronic prostatitis, the gonococcus was never recovered from the prostatic secretion, although culture methods were employed extremely favorable to its growth. Autogenous vaccine failed to produce any marked permanent effect on the cause of a chronic prostatitis, which we consider due to the histological structure of the gland under these conditions.

[B. D. W.]

SEMINAL VESICULITIS AFTER PROSTATECTOMY DUE TO INFECTION WITH MICROCOCCUS CATARRHALIS

BOYD, MONTAGUE L. (*Jour. of Urology*, Nov., 1923), reports the possibility of seminal vesicular infections being the cause of continued or recurrent fevers after prostatectomy, of discomforts and pains usually ascribed to the prostatectomy wound, and of a continuation of urinary disturbances such as increased frequency of urination and burning on urination. Case reported is a micrococcus catarrhalis infection of the seminal vesicles. [B. D. W.]

LEUKOPLAKIA OF THE BLADDER. REPORT OF A CASE

VALENTINE, JULIUS J. (*Jour. of Urology*, October, 1923), writes that the lesion seems to be limited to the bladder, since the urine obtained by ureteral catheter

is free from epithelia which are so persistently present in the bladder urine. The opinion is offered that leukoplakia usually exists in individuals: (1) who have been subjects of chronic infections of the urinary tract; (2) those who have an obstruction to the normal outlet of urine. Syphilis cannot definitely be excluded as an etiological factor in this case. Leukoplakia may have existed in this individual prior to his acquiring syphilis or gonorrhea and as a result of these infections the lesion may have been brought into activity.

[B. D. W.]

Diverticula and Cysts of the Urethra

Johnson, Franklin P. (*Jour. of Urology*, October, 1923), reports a case of cyst which had its origin probably in the left duct of Cowper's gland. It was the size of a grapefruit, enclosed in the scrotum, hanging down between and below the testicles. Two types of epithelia were present,—stratified squamous and stratified columnar. The stalk of the cyst led into the bulb posteriorly to the urethra.

[B. D. W.]

The Indications for Individual Treatment of Gonorrhea with Special Reference to the Resistance or Fastness of the Gonococcus to Germicides

Williamson, Thomas V. (*Jour. of Urology*, October, 1923), writes that the infinite diversity of the problem of gonorrheal infections imperatively demands the closest association of physician and patient. In no other way can the diverse elements entering into this great complex be intelligently dealt with. Modern urology has proved beyond a doubt that there is no comparison whatever between the results achieved when the patient is so cared for, and those where he is fitted out with a syringe and solution and allowed to shift for himself. In truth, the gravity of the disease makes it a major problem in the practice of medicine. The vast army of sterile, strictured, crippled, neurotic victims of the disease is incontrovertible evidence in support of this statement.

[B. D. W.]

Spontaneous Expulsion of Papilloma of the Bladder, with Cure

Sisk, Ira R. (*Jour. of Urology*, October, 1923), reports a case. Spontaneous expulsion is rare. Cystoscopic examination after expulsion revealed nothing more than a mild acute areal cystitis. The point of origin of the tumor could not be located.

[B. D. W.]

Utero-Vesical Fistula

Parmenter, F. J., and Leutenegger, Carl (*Jour. of Urology*, Oct., 1923), report a case of utero-vesical fistula, with the interest it awakened in making the diagnosis; also the operative method used in effecting its cure.

[B. D. W.]

Indicanaemia as a Sign of Chronic Azotemia

Schilling and Holzer (*Münch. med. Woch.*, Oct. 5, 1923) report a comparative study of indican and urea-nitrogen in the serum of nephritics and normal subjects. In the latter, they find that the content of urea-nitrogen and indican in the serum is never increased. Even in abnormal indicanuria, the indican in the serum does not exceed 1.5. In high urea-nitrogen content, the prognosis is doubtful. With increased indican, the prognosis is always grave, for it surely indicates a chronic azotemia with threatening uremia as a result of renal insufficiency. The comparison between indican and urea-nitrogen, therefore, seems most valuable. The determination of indican alone is more valuable than of urea-nitrogen alone, since from the former the prognosis of the case is established.

[R. M. G.]

The Surgical Treatment of Puerperal Fever

Verela (*Münch. med. Woch.*, Oct. 12, 1923) considers that the foundation of the surgical treatment of puerperal fever consists in wiping out the uterus, as often as necessary, with intermittent irrigation with Dakin's solution.

[R. M. G.]

The Treatment of Pyelitis

Hohlweg, from his clinic at Duisburg, discusses (*Münch. med. Woch.*, Oct 19, 1923) the treatment of pyelitis. He believes that in more than a third of the cases of colon infection of the bladder and renal pelvis, complete bacteriologic cure can be produced only by intravenous treatment with argoflavin. For the remaining two-thirds of the cases, local irrigation of the bladder and renal pelvis is the most valuable means of treatment. Intravenous injections of argoflavin are excellent to shorten and mitigate the general septic condition in pyelo-cystitis and to prepare for subsequent local treatment. The ideal treatment is a combination of argoflavin and local irrigation.

[R. M. G.]

Prolapsed Cord

Halter, from Peham's clinic at Vienna, analyzes (*Münch. med. Woch.*, Oct. 26, 1923) a series of 90,468 labor cases, among which were 894 instances of prolapsed cord. Over half of these occurred in posterior positions. The absolute infant mortality was about 50 per cent.

[R. M. G.]

Goiter and Tuberculosis

Hoffmann (*Münch. med. Woch.*, Nov. 9, 1923) discusses the relation of goiter and tuberculosis, on the basis of ten personal observations. He considers that the formation of a goiter is largely a defensive measure of the body against an active tuberculosis. Correspondingly, one should refrain from treatment of the goiter, or, if it cannot be avoided, carry it out specifically with old tuberculin. In general, one should warn against goiter operation, which should be undertaken only on urgent indication, especially when there is danger in delay.

[R. M. G.]

Malformations of the Pancreas

Duschl, from Schmincke's pathologic institute at Tübingen, reports (*Münch. med. Woch.*, Nov. 16, 1923) a case of absence of the head and tail of the pancreas in a man of seventy-two. He collects other pancreatic malformations from the literature.

[R. M. G.]

Early Anatomical Fugitive Sheets

In the autumn, 1923, issue of *Annals of Medical History* (Vol. 5, No. 3), Crummer of Omaha describes his collection of early anatomical fugitive sheets, from the fifteenth to the seventeenth centuries. He has also studied and compared a number of other similar extant sheets in European libraries. On the basis of these investigations he has prepared a check list or classification of recorded fugitive sheets of this sort, and has sketched their genetic evolution. From the Hela skeleton, the earliest known anatomical fugitive sheet, of 1493, there is a developmental sequence through the *Tabulae* of Vesalius and his imitators, the Adam and Eve plates, and the single sheets of female and male figures alone. A considerable number of types and variants are recognized.

Ten of these figures, representing typical varieties of the several classes, are reproduced in the text, two being full-page illustrations; and an eleventh is shown as a frontispiece engraving. The author has made a useful continuation of the work of Choulant, Sudhoff, Weindler, and Hollander in preserving knowledge of these interesting phenomena of anatomic history. [R. M. G.]

Neosalvarsan and Electroferrol in the Treatment of Pernicious Anemia

Hittmaier, from Steyrer's medical clinic at Innsbruck, discusses (*Wien. klin. Woch.*, Oct. 4, 1923) his experience with neosalvarsan and electroferrol in the treatment of cryptogenetic pernicious anemia. He recommends beginning treatment with electroferrol, and in case of failure continuing with neosalvarsan. Blood transfusion and other surgical and radiological treatment of pernicious anemia he regards as a last resort, which should be employed only in cases with symptoms threatening life. [R. M. G.]

Resection in Perforated Gastro-Duodenal Ulcer

Mullader and Neuberger, from Kirchmayr's surgical clinic at Vienna, reports and discusses (*Wien. klin. Woch.*, Oct. 18, 1923) his experience with resection in perforated gastro-duodenal ulcer. He believes that the prognosis depends on the duration of perforation and the condition of the patient, rather than on the type of operation employed. [R. M. G.]

Acute Myeloblastic Leukemia

Lasch, from Chvostek's medical clinic at Vienna, reports (*Wien. klin. Woch.*, Nov. 1, 1923) a case of acute myeloblastic leukemia in a susceptible patient with inferior hematopoietic system. The determining factor in the attack was probably a puerperal process six months previous. [R. M. G.]

Functional Test of the Stomach

Glassner and Wittgenstein (*Wien. klin. Woch.*, Nov. 8, 1923) report their method of functional test of the stomach, which they believe to be as important as that of the kidney. Their method consists essentially in the local excretion of a dye, which indicates the functional capacity of the gastric glands. [R. M. G.]

Transposition of Aorta and Pulmonary Artery

Homma (*Wien. klin. Woch.*, Nov. 15, 1923) reports a case, in a five and a half months child, of transposition of the aorta and pulmonary artery. This malformation he illustrates by diagrams and finds that it is explained by Spitzer's theory, of which its phenomena constitute a postulate. [R. M. G.]

Pulmonary and Tracheal Syphilis

Schnitzler, from Sternberg's pathological clinic at Vienna, reports (*Wien. klin. Woch.*, Nov. 22, 1923) a case of pulmonary and tracheal syphilis in a woman of thirty-one. Another case in a woman of sixty-three presented a gummatous syphilis of the trachea only. The demonstration of spirochetes in the wall of the trachea could not be accomplished, but there was no doubt of the clinical phenomena. [R. M. G.]

Hysterectomy or Radiation for Uterine Hemorrhage

Sellheim and Kiehne, from the former's clinic at Halle, discuss in a separate article by each author (*Münch. med. Woch.*, Nov. 23, 1923) the relative merits of Röntgen castration and vaginal extirpation of the uterus in the treatment of uterine hemorrhage. From comparative blood examinations, they conclude that patients recover more rapidly and completely from the latter procedure than from the former. [R. M. G.]

Tuberculous Cervical Adenitis in Children

McEachern, J. D. (*Canad. Med. Assn. Jour.*, Vol. 13, No. 12, Dec., 1923), concludes from a study of the literature and his own experience that the faucial or pharyngeal tonsil is the portal of entry in the majority of cases of tuberculosis of the lymph nodes in children, and should be removed in every case. The majority of cases of this disease in children are due to the bovine type of infection. The probability of a mutation from the bovine type of tubercle bacilli to the human type renders early infection a matter of serious moment. The testing for tuberculosis of all cows supplying milk for human consumption should be made compulsory. The sale of unpasteurized milk from any but certified cows should be prohibited. It is desirable that sufficient hospital and sanitarium accommodation be provided for spreaders of tuberculous infection, and that provision be made for the care of children from homes where tuberculous individuals live. In cases where the disease has not spread beyond the cervical nodes, radical operation with the removal of the portal of entry, if possible, is the surest and safest method of effecting a permanent cure. [A. W. C.]

Hereditary Syphilis

Morgan, E. A. (*Canad. Med. Assn. Jour.*, Vol. 13, No. 12, Dec., 1923), writes of this subject from the Hospital for Sick Children, Toronto. He found about 670 of the 2000 stillbirths and miscarriages in Toronto due to syphilis, about 4 per cent. of ward admissions due to the disease. He found one quarter of the late cases reporting with incurable physical defects, as deafness, permanent impairment of vision, and mental deficiency. The problem is a serious one and not sufficiently recognized by the profession. Antenatal efficient treatment should save over 90 per cent. of otherwise congenital cases or miscarriages. He advocates early intensive treatment in the infants unless they are too sick, maintenance of maternal nursing at all costs. In late cases he advocates two years of treatment. [A. W. C.]

Syphilis as We See It among the Natives of Buchuanaland Today

McArthur, C. D. (*Amer. Jour. Syph.*, Vol. 7, No. 3, July, 1923) describes in detail with many fine photographs syphilis as it occurs there, differing considerably from that seen in this country and Europe. There is seen very little visceral syphilis, practically no neuro-syphilis; isolated lesions are unusually chronic. Genital chancres are relatively uncommon, due to a certain amount of regard for virginity, while unnatural practices and the common use of pipes, eating and drinking utensils, and other dirty habits account for the majority of cases of acquired disease. Congenital syphilis is general in many families, while miscarriages from this cause are not common. The author, while aware that third generation syphilis cannot be proved, feels sure from a study of over 1000 families that in Buchuanaland, at least, third and even fourth generation syphilis does commonly occur. [A. W. C.]

Monilethrix

Tobias, N. (*Arch. Derm. Syph.*, Vol. 8, No. 5, Nov., 1923), describes five cases of this abnormality occurring in three generations of one family, the largest number of familial cases in American literature. [A. W. C.]

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TORCH-BEARERS

AT no time in the history of medical progress have the opportunities for leadership in medical thought and medical advance been greater than at the present. It must not be forgotten, however, that opportunity is almost synonymous with responsibility; that in proportion to the opportunities which are opened up before us is the responsibility imposed upon us to take full advantage of these opportunities, to develop them to their limits, and to be ever on the alert for further ones of which to take advantage. The parable of the talents is a permanent lesson for Christianity, which is to say civilization, for Christianity in its broadest sense remains the greatest driving force the world has ever known.

Those who have had the opportunities of leadership in internal medicine placed in their hands are today the most potential figures in our profession. The art and practice of surgery have taken prodigious strides in the last few decades due to the influence of Pasteur and Lister, and moving under the impetus derived first from antiseptic and later from aseptic technique, until now every part of the human body has been invaded, and with success. Surgery, notwithstanding, except for further perfections of technique, has reached the limits of its development, for the present, at least.

The application of the fundamental sciences to the problems of internal medicine, on the other hand, is still in its beginnings. Our knowledge of body chemistry and metabolism and the physiology of disease is almost rudimentary, although doors have been opened that permit imperfect views of the rich fields beyond.

The surgeons have done their utmost in the control of cancer; the problem is now a medical one. Pernicious anemia and other diseases of the blood; the chronic degenerative conditions; further successes in the diabetic field; a larger and more practical knowledge of infection and resistance,—these are but a few of the pages that must be written full by the internist.

There is an everlasting flame of opportunity that cannot be extinguished, but at it each must kindle his own torch to light his way and that of others whose guidance has been given to his care. Those men who have been chosen as leaders in the field of internal medicine in our hospitals and schools must be the torch-bearers of our generation.

INVESTIGATIONS OF PRACTICAL VALUE

INTERESTING statistics and statistics invaluable to the medical profession have been rapidly accumulating in the few years that examination of freshmen has been compulsory at Harvard. The results of these examinations, made annually during the last ten years, have been recently announced at Cambridge, according to the Boston *Herald*.

Important among the data enumerated is the fact that more than 70 per cent. of the present freshman class have systolic cardiac murmurs, although less than 2 per cent. have organic heart lesions. About 7 per cent. of the freshmen have albumin in the urine, and his experience of the last ten years enables Dr. Roger I. Lee to state emphatically that this sign is not necessarily a symptom of nephritis; indeed in almost every case it disappears during the college course without treatment.

Other interesting facts brought out are that over 50 per cent. of the freshmen have had some nose or throat operation, and that the figure of 7 per cent. who have been operated upon for appendicitis is fairly constant. Beginning in 1919, the freshmen have been rated for posture, and in that year over 80 per cent. were found to have poor posture. This figure has constantly improved until in the fall of 1923 only 68 per cent. were rated as standing poorly.

In general, this group of students seems to have had the benefit of more intelligent medical supervision than some of their predecessors, and instances of neglected teeth, diseased tonsils and poor vision, not corrected by glasses, are uncommon.

Dr. Lee is to be congratulated on the unusual organization which he has developed in Cambridge, and the striking success with which it has met. A knowledge of the average physical condition of a certain section of the population is more valuable to us than a knowledge of disease without a normal standard of health by which to measure its importance. The intelligence with which this work has been conducted should give it high rank in constructive medicine.

HONEST THERAPEUTICS

KNOWLEDGE of drugs and their uses is gradually, it would appear, becoming confined to the pharmacologists. "Therapeusis made easy" might well become the slogan of the manufacturers of proprietary remedies, and there is no doubt that many otherwise reputable physicians frequently prescribe by name proprietary preparations of whose formulae they are unaware.

The school of practitioners who could write at will, correctly and with great speed, prescriptions calling for four or more ingredients is gradually passing. The modern principle is to know a few drugs, to know them well, to use them only for definite indications, and to mingle them as little as possible. There are those who can be said to have lived up to this principle honestly, but, on the one hand, are those who still write with ease prescriptions for ailments of which they may perhaps be sometimes ignorant, and on the other hand are those who delegate this branch of their art to the manufacturers.

We are all familiar with the roving agents of the drug trade who come to our offices, often in lieu of patients, and help us while away the hours, leaving, before they depart, their quota of sample bottles to take their places, for a time, on the revolving book-case before fulfilling their destinies in the office ash can.

Some of these are honest preparations of proven value, of which we are glad to be made aware; others are the products of secret processes, and these we should shun if we are to practice medicine in justice to our patients and ourselves.

JOINT COMMITTEE ON STATE AND NATIONAL LEGISLATION

THE attention of the members of the Massachusetts Medical Society is called to proposed legislation affecting the medical profession, and the active coöperation of the Auxiliary Committee is requested.

House Bill No. 62 is a petition of Joseph D. Toomey relative to the qualifications of applicants for examination for registration as physicians.

This petition meets with the approval of both profession and the public, being a needed law. Some opposition is expected from medical schools which do not require customary entrance examinations and standard curriculum, but our united efforts should help to pass this bill.

House Bill No. 223 is a petition of Merle D. Graves for an amendment of the law relative to midwives and the practice of midwifery.

This petition requires registration by the Board of Registration in Medicine, after an oral and written examination. It also requires, that "she is a graduate of a reputable school for midwives approved by the board." Opinions of physicians who practice in localities which have a large percentage of foreign-born patients are being solicited, that the committee on legislation may be properly advised concerning the bill. The consensus of opinion seems to be, that when the foreigner has been here for a few years, a physician and not a midwife is employed for maternity cases.

House Bill No 414, introduced by Dr. Samuel B. Woodward, a former president of the Massachusetts Medical Society, provides for vaccination of certain children in private schools.

This bill calls for our individual and also for our united effort in order that the legislators might be properly instructed with facts and figures, by their family physicians, before voting on this important measure. Universal vaccination should stamp out the dread disease of smallpox.

THE ANNUAL DIRECTORY

THE JOURNAL has issued as a supplement to the issue of January 3 the annual directory of the Massachusetts Medical Society, with both alphabetical and local lists of the Fellows. The Society had on January 1 4107 Fellows, an increase of forty-nine over last year at that time. All Fellows are urged to look at their names in the directory to see that they are correctly entered and their addresses as they wish them. Without assistance from the Fellows themselves it is impossible to keep the list accurate. A postal card to the secretary will put matters straight, if they are not straight. The last address is given in default of a new one. Another year it is hoped to issue the directory in book form, instead of flat, as in recent years, reverting to the shape in which it appeared previous to 1914. Don't forget to look for your name in this year's directory.

Miscellany

THE LIFE EXPECTANCY OF COLLEGE ATHLETES

FRESH data on "The Life Expectancy of College Athletes" was furnished for the officials meeting at Atlanta by William H. Geer, director of the department of physical education at Harvard University, when he read a paper at the annual meeting of the Athletic Research Society. Mr. Geer's fact-finding was a preliminary report on the subject, based on the records of Harvard athletes who participated in four major sports over a period of nearly half a century.

The Harvard official, after sketching the results of previous studies on this fascinating theme, reaches the conclusion that the best method of obtaining more reliable information is to conduct a similar research at institutions throughout the country, but calls attention to the fact that heredity is disregarded in the investigation.

His study, based on the lives of men who won their "H" in rowing, baseball, football, and track athletics, reveals that the gridiron heroes have died in greater comparative numbers, for the ratio of actual deaths as contrasted with actual deaths in the other three branches of sports is about 70 per cent. Football's ratio is 97 per cent., yet this is not considered to be particularly significant, in that he knows that "a few early deaths in the football group had no relation to athletics."

Among Mr. Geer's early remarks were: "That the evidence of a statistical study is favorable to the athlete ought not to occasion any surprise because the college athlete is a member of a highly selected group. . . . If it could be proved by statistical or other studies that this condition did not obtain, there would be ground for serious charges against intercollegiate athletic competition. Whenever charges have been made against competitive athletics, carefully conducted investigations have failed to substantiate them."—*Boston Transcript.*

BETH ISRAEL HOSPITAL FUND

ADDITIONAL contributions amounting to $75,923 were reported December 26 at a meeting of the workers in the million-dollar Beth Israel Hospital campaign, making the total $660,923. This sum, it was stated by Al. A. Rosenbush, chairman of the campaign, was contributed by fewer than nine hundred individuals.

The meeting, which was attended by 150 representatives of the trades teams, was one of the most enthusiastic held during the campaign. It was announced that a number of contributions were received unsolicited, among them being one of $500 from the Boston *Post.*

The largest amount reported by a trade team was from the real estate group, captained by Joseph Rudnick, with $22,620. Other team reports were as follows: Autos and supplies, $1205; printers and stationers, $750; lawyers, $5705; ladies' wearing apparel, $5300; men's clothing, $9585; dry goods, $8225; food supplies, $2025; dentists, $700; physicians and druggists, $2425; jewelers, $1875; leather and shoes, $3855; furniture, $4750; cleansing and dyeing, $2710; miscellaneous, $4193.

At last night's meeting Albert A. Ginsberg, president of the Beth Israel Hospital Association, stated that the Jewish people of the community owe a duty and a debt to the city of Boston for the medical treatment they have received in the city's institutions, and the best payment of that obligation, he declared, will be to erect this hospital as a gift of the Jews to the people of Boston.

DRIVE IS OPENED FOR N. E. BAPTIST HOSPITAL

THE campaign of the New England Baptist Hospital for $400,000 to complete the building now in process of construction on Parker Hill Avenue, Roxbury, opened officially in Ford Hall with a meeting of more than sixty workers whose aim will be to secure the necessary money by January 21.

The campaign received an auspicious start, as W. A. Jepson, chairman of the campaign committee, announced that the list of contributors was headed by the late Col. Edward H. Haskell, who a few days before his death last Tuesday in Pasadena, Cal., gave $50,000, this contribution being in addition to the modern Nurses Home presented to the hospital last month. A contribution was also received from Lieut.-Gov. Alvan T. Fuller, but the amount was not announced.

Chairman Jepson emphasized the fact that the New England Baptist Hospital is open to everybody, regardless of race, creed or color, and although nearly 35 per cent. of its services have been given free or part free, the hospital in its thirty-one years of existence has never had a deficit.

Dr. W. Quay Rosselle, pastor of the Malden Baptist Church, said: "Wherever Christianity has gone its work has resulted in schools, hospitals, and churches. Colonel Haskell in his generous gifts to the New England Baptist Hospital, walked in the shoes of the Lord."

A. C. Olson instructed the workers how to go about the campaign work. Talks were also given by each of the ten division leaders in the campaign.

TO GIVE MEDICAL LECTURES

UNDER the direction of the Harvard Medical School, a series of lectures open to the public began on Sunday, January 6, and will continue through May 4. Each of the lectures will be delivered at four o'clock in the amphitheatre of building B. Doors will be closed five minutes after the hour. The list of speakers and subjects for the series is as follows:

January 20.—Dr. Benjamin White, "Smallpox and Vaccination."

January 27.—Dr. George S. Derby, "Conservation of Eyesight."

February 3.—Dr. William H. Robey, "What Can We Do to Prevent Heart Failure?"

February 10.—Dr. James H. Means, "On the Various Types of Thyroid Disease and Their Significance to the Individual and to the Community."

February 17.—Dr. William H. Geer, "The Relations of Exercise to Health."

February 24.—Dr. Charles J. White, "The Contagious Diseases of the Skin and Possible Measures to Avoid Them."

March 2.—Dr. Charles A. Brackett, "Pain and Anesthetics."

March 9.—Dr. Elliott P. Joslin, "Diabetes and Insulin."

March 16.—Dr. Lawrence J. Henderson, "Blood."

March 23.—Dr. James S. Stone, "Some Surgical Conditions Common among Children."

March 30.—Dr. David Cheever, "Successes and Failures of Surgery."

April 6.—Dr. Franklin S. Newell, "Modern Obstetrics." (To women only.)

April 13.—Dr. Hans Zinsser, "The Question of Specific Treatment in Tuberculosis."

April 27.—Dr. Harris P. Mosher, "Catarrh."

May 4.—Dr. George A. Dix, "Syphilis."

THE CITATION IN THE AWARD OF THE SOFIE A. NORDHOFF-JUNG CANCER RESEARCH PRIZE

DR. JOHANNES FIBIGER, professor ordinarius in pathological anatomy at the University of Copenhagen, has demonstrated, following repeated experimentation, that parasites play an important rôle in the formation of certain types of tumors in the proventriculi of rats.

Furthermore, he has succeeded in effecting papillomata and undoubted carcinoma through the parasite nematode. Though the earlier results of Fibiger's work date back a number of years, he unremittingly labored towards an interpretation of the significance of parasitic irritants in malignant tumor formation, likewise of mechanical and chemical irritants. Fibiger and his associates have contributed generously to the literature of cancer production through the feeding to rats of oats and the application of tar to their tissues. In this way they have confirmed the successful work of Stahr and Yamagiva.

The commission on the award consisted of Professors Borst, Doederlein, v. Romberg and Sauerbruch, all of the University of Munich.

HAMPSHIRE DISTRICT MEDICAL SOCIETY

A REGULAR meeting was held on Wednesday, January 9, 1924, at 4.30 p.m., at Boyden's Restaurant, Northampton. Dr. George E. McPherson, superintendent of the Belchertown State School, spoke on the subject of "The Commonwealth's Program for the Feeble-minded Child." Dr. McPherson dwelt especially on what is hoped to be accomplished educationally and otherwise in the school.

Announcement was made of the sale of "A History of the Massachusetts Medical Society" by Dr. Walter L. Burrage, orders for which could be placed with the District Secretary if desired. Dinner was served at 6 p.m.

Dr. George W. Rawson of Amherst has left for a cruise around the world. He will resume practice early in July.

N. E. BAPTIST HOSPITAL PROFITS BY COLONEL HASKELL'S WILL

BY the will of Edward H. Haskell of Newton, filed recently for probate, approximately $500,000 is left to public institutions. There are private bequests totalling $50,000. No valuation of the estate is given.

The chief beneficiary among the public institutions is the New England Baptist Hospital, Boston. The will directs the executors of the estate to complete any part of an unexpired contract entered into during the lifetime of the deceased, for the erection of a building in connection with the hospital and to be known as the Haskell Home for Nurses. In completing this contract the executors are ordered to spend up to $120,000, less any sums already advanced by the deceased for this purpose.

The will also contains two $50,000 bequests to the hospital, one of which is to be used toward the creation of a new group of buildings now under construction; and the other to be used in maintaining a district nursing service among the worthy poor of Roxbury. The first of the $50,000 bequests is made with the provision that sums already given by the deceased for the purpose outlined, be deducted from the $50,000.

Many smaller bequests are made to various educational institutions and missions. The Addison Gilbert Hospital of Gloucester is a beneficiary to the extent of $10,000, and the Newton Hospital gets $5000.

BERI-BERI IN JAPAN

The Japan Medical World publishes an article by Ohomori in which statistics show that the mortality due to beri-beri in Japan increased from 1910 to 1918, and since the latter date there was a marked decrease. The number of deaths have varied from five to twenty thousand, with an average of two deaths per ten thousand of the population. This disease accounts for 1.23 per cent. of all deaths. The ratio of deaths corresponds closely with the rice production. The disease is most prevalent among soldiers, laborers, factory girls, and students or, in other words, in cities and industrial regions. It is claimed that the essential cause of the disease is the lack of vitamine B, for beri-beri has been found when polished rice did not enter into the diet, and foods rich in vitamine B have cured the disease promptly.

Status lymphaticus and warm temperature with high humidity are predisposing and inducing causes. In the treatment two hundred grams of bran will produce almost immediate benefit.

ISOLATION OF THE ACTIVE PRINCIPLE OF THE PITUITARY GLAND

At a meeting of the Federation of American Societies for Experimental Biology held in Cincinnati, December 31, Professor J. Abel of Johns Hopkins reported that pituitary extract had been obtained as a highly purified salt of tartaric acid, and that it was probably a single chemical compound capable of being made synthetically.

BERKSHIRE DISTRICT MEDICAL SOCIETY

A regular meeting was held in the rooms of the Park Club at Pittsfield, Friday, January 11, 1924, at 2.30 p.m.

William P. St. Lawrence, M.D., of the Sloane Hospital for Women of New York City, spoke on "Care of the Infant During the First Six Months."

F. H. Howard, M.D., of Williamstown, reported cases of encephalitis.

ARTICLES ACCEPTED BY THE COUNCIL OF PHARMACY AND CHEMISTRY

In addition to the articles enumerated in our letter of December 1, the following have been accepted:

Cutter Laboratory.—Anti-Anthrax Serum for Human Use—Cutter, Diphtheria Toxin-Antitoxin Mixture—Cutter, Diphtheria Toxin for the Schick Test—Cutter; Rabies Vaccine—Pasteur (Cutter), Tetanus Antitoxin for Human Use (Concentrated)—Cutter.

E. R. Squibb and Sons.—Diphtheria Toxin-Antitoxin, 0.1L+.

Winthrop Chemical Company.—Elixir of Veronal.

W. A. Puckner,
Secretary Council on Pharmacy and Chemistry.

THE EYE SIGHT OF FORD WORKERS

Twenty-nine thousand Ford workers have defective vision, according to a report made by the Ford management to the Eye Sight Conservation Council of America, which, following investigation of industrial waste of the Hoover Committee of the FederatedAmerican Engineering Societies, is conducting a survey of eyesight conditions among the nation's industries.

"The present number of employees of the Ford Motor Car Company at Detroit," said the Ford report to the Council, made public here, "is 65,000. Of this number 60,000 have received eye examinations. The company first started to make tests for sight in 1912.

"The results of even superficial tests of this sort show the amazingly high proportion of industrial workers having defective vision. Of the 60,000 persons who received eye examinations, 31,000 were found to have normal vision, and 29,000 were found to have defective vision. Almost half of this large group of workers, or 48.5 per cent., had vision below normal."

OXYGEN BREATHING APPARATUS FOR MINERS

Nearly 30,000 miners in the United States have been granted certificates by the Department of the Interior for their proficiency in the use of self-contained mine rescue oxygen breathing apparatus after a complete course of training from instructors of the Bureau of Mines. Several thousand other miners have been trained by state mining departments and mine operators. Several thousand self-contained mine rescue oxygen breathing apparatus have been sold in the United States; the Bureau of Mines alone owns about 300 sets, and employees of the Bureau have used breathing apparatus as a means of saving life or property at 151 mine explosions or mine fires.

The history of breathing apparatus dates back at least to 1853, when Professor Schwann devised a portable machine similar to those in use today for a prize competition of the Belgian Academy of Science. The Fleuss apparatus in its original form was designed by H. A. Fleuss over forty years ago in England. In 1903 an early type of the Draeger apparatus appeared in Germany. Early developments and experiments in breathing apparatus were mainly con-

fined to European countries, the value of the apparatus being quickly recognized by various European governments. The Philadelphia & Reading Coal and Iron Company of Pennsylvania, and the Anaconda Copper Mining Company of Butte, Mont., were among the first companies in this country to provide rescue apparatus at their mines, making these installations about 1907.

Obituary

CHARLES PARKER BANCROFT, M.D.

Dr. Charles Parker Bancroft, of Concord, N. H., died suddenly of cerebral hemorrhage on December 14, 1923, at the Mary Hitchcock Hospital in Hanover, N. H., where he had been engaged at the time in the duties of consultant in mental hygiene, in which capacity he had served at Dartmouth College for three years.

Dr. Bancroft was born in St. Johnsbury, Vt., January 11, 1852. He was educated in the public schools of Concord, N. H., at Phillips-Andover Academy, and at Harvard University. He received his A.B. degree from Harvard in 1874, and graduated from the Medical School there in 1878. He engaged in general practice in Boston, and served as house officer in the Boston City Hospital. He also served as assistant superintendent of the New Hampshire Asylum for the Insane, now the New Hampshire State Hospital, for a brief period, and in 1882 was appointed Superintendent of the New Hampshire State Hospital, succeeding his father, who had been Superintendent of this institution for twenty-five years. Dr. Charles P. Bancroft resigned as Superintendent of the hospital in 1917, after serving in that capacity for thirty-five years. The combined services of his father and himself extended over a continuous period of sixty years.

In 1890 Dr. Bancroft carried out the movement initiated by his father for state care of the insane, which transferred patients from the county poor farms and placed them under care of the State, thereby making better and more scientific treatment possible.

In 1888 Dr. Bancroft established a Training School for Nurses at the New Hampshire State Hospital, one of the pioneer schools in hospitals for the insane.

Dr. Bancroft was an able alienist. His services were sought both in and out of his State in courts of law for instruction to the court and jury. He had written much in short monographs that have been justly prized for their scientific and honest deductions. He had time to be a helpful citizen. His interests were as many as there were needs in deserving causes. With the soundest integrity, without ostentation, Dr. Bancroft was a fine example of a normal man possessing a well-balanced, scientific mind.

Dr. Bancroft was a member of the American Medical Association, the American Psychological Society, the New England Society of Psychiatry and Neurology, the Boston Society of Psychiatry, the Boston City Hospital Alumni Association, having been the president of the last four societies. He also had been the president of the New Hampshire Medical Society.

At the time of his death he held the position of chairman of the State Board of Charities for New Hampshire and also of the Board of Trustees of the New Hampshire State Hospital.

HENRY ALBERT SUITOR, M.D.

An able physician and a keen analyst, possessed of a sympathetic personality, has been lost to those who knew him, through the death, on December 2, of Dr. Henry Albert Suitor. Those qualities that fix the moral stature of a man,—patience, kindness, generosity, unselfishness, sincerity,—were in a great measure contributory to a successful career, which he earned by unremitting effort.

Born September 17, 1879, at Fairlee, Vt., his boyhood days were passed in environments that tested and strengthened his moral stamina. Graduating from the high school at Barton, and having completed a three-year preparatory course at Dean Academy, he subsequently graduated from Tufts College Medical School in 1906, after which he engaged in the practice of medicine at West Burke. In 1910 he established himself as a practicing physician at South Deerfield. A member of the American Medical Society, he was also president of the Franklin County Medical Society, a member of the Bi-County Medical Society and on the staff of the Farren Memorial Hospital, Greenfield, Mass. For many years he was the school physician at South Deerfield.

Of Dr. Suitor it may truthfully be said that he adhered strictly to the ethics of his profession. His patients were his friends, and with an utter disregard of conditions, inclemency of weather, hour of the night or the distance to be covered, an urgent call for assistance always found him ready and willing to respond.

In 1907 he married Sadie Louise Gilman of Waterville, Quebec, who with their two sons, Douglas and John, survives him. He also leaves two sisters, Mrs. Robert Addley, of Lancaster, N. H., and Mrs. Ethel Davis of Hudson, Mass. In his home he was a devoted husband and father, and his happiness with his family and home contributed to the rounding out of a singularly full life.

He was a member of Melha Temple, A.A.O.N.M.S., a life member of the Past Mas-

ters' Association of Masons of Franklin and Hampshire Counties, member of the Greenfield Chapter of Rose Croix, Greenfield Council Princes of Jerusalem, Greenfield Lodge of Perfection, member of the Connecticut Valley Consistory, King Philip Chapter, O.E.S., and a past master of Mount Sugar Loaf Lodge, A.F. and A.M., of South Deerfield.

He was a lover of clean sport, having played on the Tufts College varsity baseball team for four years, the last year of which he served as its captain. The interest in athletics which he always maintained accounts for the keen delight afforded him in following the development of the undergraduate, counselling him when advice was in order, and reprimanding him when the occasion required, but always his advice was such as an older brother might give to a younger one. In work and in play his life was one of sacrifice, service, and devotion to his fellowmen.

On March 5 of last year, after a very trying winter, he suffered a shock which rendered him incapacitated for further duty. The subsequent months were spent in a vain attempt to regain his health, during which there were brought into play the fighting qualities that have characterized his entire life. The intensity of the shock was, however, too severe to be overcome, even with the assistance of the best medical and surgical skill which was afforded him, and on the night of December 2 he crossed to the other side of the valley.

The funeral service, which was held in the Congregational Church at South Deerfield on Wednesday afternoon, December 5, was, regardless of the inclemency of the weather, largely attended, representative bodies of the various organizations of which he was a member, together with the students of Deerfield Academy, being present.

The impressive eulogy delivered by the pastor, Rev. Charles L. Stevens, based on an intimate acquaintance, was a fitting tribute to the man who had devoted so many years of his life to his fellows. Howard Roche of Gardner, Mass., accompanied by Miss Blanche Brown, sang with deep feeling, "Sometime We'll Understand."

His brother Masons at his request performed the last rites of the order over his remains in Laurel Hill Cemetery at Old Deerfield, where a profusion of floral tributes bore but mute testimony to the esteem in which Dr. Suitor was held. The bearers were Sam. W. Childs, Robert L. Savage, George Canning, and George N. Morse. During the hour of the funeral all business in South Deerfield was suspended.

EDWARD MARWICK PLUMMER, M.D.

Dr. E. M. Plummer, Professor of Otology in Tufts College Medical School, died at the Carney Hospital, of pneumonia and heart disease, January 3, 1924. He was born in Raymond, Maine, September 25, 1856, was a graduate of Dartmouth Medical School in the class of 1882, started practice in Portland, came to Boston in 1887 and settled in Charlestown. In 1890 he joined the Massachusetts Medical Society. He devoted himself to diseases of the ear early in practice, became aural surgeon to the Carney Hospital and professor of otology at Tufts thirty years ago. He was interested in swimming as a form of exercise and was for many years a constant frequenter of the L Street bath-house, being a member of the American Association for the Advancement of Physical Education. Besides giving instruction at the Tufts Medical School he was an instructor in the Boston Polyclinic, was on the consulting staff of the Rufus Frost Hospital in Chelsea and the Deer Island Hospital, Boston Harbor.

Dr. Plummer held membership in the American Otological Society, the New England Otological and Laryngological Society, American College of Surgeons, American Medical Association, Boston Medical Library, Charlestown Medical Society, the Society of Colonial Wars, Sons of the American Revolution, and Appalachian Mountain Club.

He is survived by a widow and two children.

News Items

Removal.—Dr. Frank E. Stowell announces the removal of his offices to the Chapin Building, 29 Pearl Street, Rooms 528-530, Worcester, Mass.

Officers of National Committee for Mental Hygiene.—Dr. Frankwood E. Williams was re-elected Medical Director of the National Committee for Mental Hygiene at the annual meeting of the Board of Directors, held in New York City, on December 28. The following were elected members of the Executive Committee: Dr. William L. Russell, Medical Director, Bloomingdale Hospital, White Plains, New York; Dr. Walter E. Fernald, Superintendent, Massachusetts School for the Feeble-minded, Waverley; Dr. Stephen P. Duggan, Director, Institute of International Education, New York City; Dr. William A. White, Superintendent, St. Elizabeth's Hospital, Washington, D. C.; Dr. Charles P. Emerson, Dean of the Medical School, University of Indiana, Indianapolis; Dr. C. Floyd Haviland, Chairman, State Hospital Commission, Albany, New York; Dr. Arthur H. Ruggles, Superintendent, Butler Hospital, Providence, Rhode Island, and Mr. Matthew C. Fleming, attorney, New York City. Dr. William H. Welch, President of the National Committee for Mental Hygiene, presided.

ANNUAL MEETING OF BOSTON MEDICAL LIBRARY.—At the annual meeting of the corporation of the Boston Medical Library, held in the Library, January 8, 1924, the following officers and members of committees were elected for the year 1924: President, Dr. George H. Monks; vice-presidents, Dr. William N. Bullard, Dr. Homer Gage, Dr. George G. Sears; secretary, Dr. Walter L. Burrage; treasurer, Dr. Richard G. Wadsworth; librarian, Dr. John W. Farlow; executive committee, Dr. John W. Bartol, Dr. John W. Cummin, Dr. Edward C. Streeter; committee on medical and social meetings, Dr. Malcolm Storer, chairman, Dr. William B. Breed, Dr. Hilbert F. Day, Dr. William W. Howell, Dr. A. William Reggio; committee on membership and elections, Dr. Charles F. Painter, chairman, Dr. Leroy M. S. Miner, Dr. Anna G. Richardson, Dr. John C. Rock, Dr. Conrad Wesselhoeft.

The corporation voted to ratify the action of the executive committee in selling the last of the real estate in Newburyport which had been left to the Library by the will of the late Ellen Brewer Wyman of that city in 1915.

The finances of the Library were reported to be in a satisfactory condition, although the treasurer would like to have receipts from a larger membership. It is hoped that the newly elected committee on membership and elections, headed by Dr. C. F. Painter, will be able to secure a larger percentage of the physicians of Greater Boston for the rolls of the Library.

Dr. Richard P. Strong gave a most interesting talk on tropical ulcerations of the skin, illustrated by lantern slides, which was enjoyed by those present.

According to the report of the Librarian the Library now contains 119,000 books and 77,000 pamphlets.

Correspondence

A REPORT OF AN INTERESTING CASE

Mr. Editor:

I am sending with this the transcript of a report of a case of rupture of the uterus which occurred in the practice of Dr. John Walton, of Pepperell, Mass., in the year 1800. This report was written in a beautiful fine script and no doubt with a quill, upon both sides of small leaves of paper, now brown with age, measuring about six by three inches. Apparently they were taken from a small notebook. They are much worn at the edges, and in places are hardly legible.

This interesting report was found by Dr. Charles G. Heald of Pepperell among the papers and books which his father, the late Dr. William F. Heald, had received from Dr. Walton or his estate. Judging from the minuteness of detail, it was written soon after the occurrence of the tragedy, while it was still fresh in mind. I believe the transcription is very nearly exact, although some words have been partially obliterated by the wear on the paper; attention has been called to the doubtful portions by notes in brackets. No comment on the advantages afforded the practitioner of today by the triumphs of modern surgery could be half so eloquent as is this vivid picture of the hopeless situation which confronted the doctor of a century ago.

In a personal communication Dr. Heald has given the result of investigations made by him regarding some of the individuals mentioned in the report. He writes: "I think the 'Dr. P.' must have been Dr. Oliver Prescott, who was at that time practicing in Groton. He was a younger brother of Col. Wm. Prescott of Bunker Hill fame. It is interesting to know that he was born April 27, 1731, took his first degree at Harvard in 1750, and his second degree there in 1753. He was prominent in the Massachusetts Medical Society and the New Hampshire Medical Society, and in 1791 the degree of M.D. was conferred upon him *pro honoris causa* by Harvard University. Who the 'Dr. H.' was I cannot find out. There was in Pepperell at that time, however, a Joseph Heald (my great great grandfather), who was an 'herb doctor,' among other activities. He was not a graduated physician and I do not know that he made medicine a profession. He was in the state Legislature for years and very active in town affairs, and may have acted as an obstetrician, though I can find no proof of this. He was an able man, however, and I have the big iron mortar and pestle he used in making his remedies, and the small drawers that used to contain his herbs are still in existence in the house in which he lived.

"Dr. John Walton died in Pepperell December 21, 1862, at the age of 92 years. The book plate in his medical books bears the date 1791, and I am reasonably sure that he was practicing here at that time. My father (Wm. F. Heald) began practice in Pepperell in 1874 and so continued, with the exception of a few years, until his death in 1907.

"This seems about all I can tell you at present. From the woman's initials (P——y E——n) I find in the old Parish Records the death of 'Mary Emerson, Feb. 27, 1800, aet 38 years, in travail.' [P——y would, of course, mean Peggy, the familiar equivalent of Mary.] If this is the same person referred to, it is of interest to know that she was the wife of a son of Parson Emerson, who was the minister here and who is supposed to have made the prayer for the Colonial troops the night before the battle of Bunker Hill." The transcript is as follows.

HERBERT L. SMITH, M.D.

Nashua, N. H.

A LACERATED UTERUS

Mrs. P——y E——n Aet 39 of an extraordinary short stature & extremely corpulent being married about 4 [?] years was delivered of two mature large but dead children, & with extreme difficulty & suffered 5 abortions. About 8 Years since she was exercised with a Mi—— [illegible] fever which terminated in an ague sore, or abscess, at an equal distance between ye tuberosities of ye Os femoris & left kidney after which she was frequently exercised with pains & sometimes [?] nausea at ye stomach. Being often called upon, by her, for relief, I found that 01. Ric. answered the best purpose of any medicine prescribed & when this could not be obtained the smoke of Tobacco afforded partial ease.

Feb. 23 1800 at 10 O'Clock A.M. Labor pains commenced, she being pregnant with her 3d child. At 3 O'Clock next morning J. W. her physician & accoucheur, was desired to attend. All this day & ye night ensuing ye pains were frequent regular, strong & laborious, but had little tendency to dilate ye *Os internum*. The following day ye pains ye same, stronger if possible; & at 1 O'Clock in ye morning, ye waters had largely protruded ye Os externum, to ye bigness of a Ten cup; they now burst & discharged large quantities, while ye patient is in an erect position. Upon further examination ye *Os Internum* is found to be in diameter equal to a pi——reen [portion of word illegible].

The pains proving inefficacious as it is thought advisable to call in Dr. P. He visits at 8 O'Clock A.M., & finds ye head resting on ye brim of ye pelvis, as had been suggested; the *os internum* lax, thick & but little dilated, & enquiring relative to former labors, & finding they were tedious, mentions ye propriety of trusting still to ye operations of nature, rather than to use, or attempt any extraordinary assistance. Reccommends Venesection & a cooling chathartic as her strength is no ways exhausted & her pains continue strong, & takes his leave.

The bleeding is opposed, in consequence of difficulties heretofore arising from that source, but ye chathartic is administered & operates favorably.

26. The pains & their effects much ye same. D. P. is again called upon & finds things as they were 26 [?] hours before, excepting an increase of pains in frequency & strength. Excepting from ye difficulties of ye case an unfavorable issue reccommends ye calling of Doct. H. an old & an experienced practitioner, & in ye interim ye patient is supported by L. L. mild cordials & soothing conversation, ye progress of ye Labor being carefully attended to at ye same time.

27th D. H. arrived at 4 O'Clock A. M. & finding ye pains a littled abated in their frequency & force, ye os internum dilated to ye size of a crown piece feeling thick & soft during ye intermissions, but tense & hard in ye paroxysms of ye pain & ye head of ye foetus still remaining upon ye brim of ye pelvis. He gave it as his opinion that these circumstances would not justify an immediate attempt to deliver her by forcible means, but that we ought to avail ourselves of every advantage expected to be derived from delay, and ye relaxing power of opiates exhibited ye preceeding evening, & to wait ye vigorous return of ye pains, especially as her strength & spirits hold out remarkably well, there being no particular symptoms of imminent danger present.

Accordingly no attempt was made to deliver her, & she continued much in ye same state during ye remainder of ye night & next morning untill about 10 O'Clock A. M. when her pains were observed to encrease in frequency & force & ye *os internum* was so far dilated, that her delivery was judged to be practicable, without greatly endangering its laceration, although ye head of ye foetus had not in any measure altered.

On consultation it was now unanimously agreed that ye pains could never effect her delivery & to put her strength to further trial by further waiting, must endanger her life by the inflammation & mortification, which ye long continued & violent pressure of ye head upon ye parts might induce. Accordingly an immediate attempt to deliver with instruments was resolved upon & every disposition made for that purpose. But before D. H. to whose lot it fell to commence ye operation could be seated, in ye midst of a strong pain ye patient suddenly complained, that she felt such a pain, as she was sure she never before experienced, & being asked where it was, she clapped her hand upon ye abdomen, & said it extended from her stomach to *ye pubes* & groin. And being further questioned what it resembled; she said she could compare it to nothing but a violent inflammation.

It ought to be remarked, that this new & extraordinary sensation in ye abdomen seemed instantly to arrest & suspend ye opperations of ye natural Labor pain in ye midst of it. But this new sensation, however, in a few minutes subsided in a considerable degree. After the usual period between her pains had elapsed, there was ye appearance of another labor pain coming on, which immediately terminated like ye preceeding one, only in an increased degree of the unusual distressing inflammation rather sensation of ye abdomen; & this again in its turn, in a great measure soon subsided, leaving after it a sense of fulness & pressure at ye stomach, or uneasy feeling in ye abdomen, together with a short laborious respiration.

From this time, 'till her death, she never felt ye least sympton of another Labor pain. But these last symptoms remaining, she desired to be raised from a supine to a setting position, which was accordingly done; but in her transition from ye bed to ye chair, a quantity of fluid was discharged upon ye floor, which had ye appearance of blood & much alarmed ye attendants, but which upon a minute inspection was found to be only water tinged with blood.

The symptoms taking this strange turn ye resolution to attempt her delivery was suspended, in order to investigate ye nature & cause of those unexpected & extraordinary occurrences. However, being placed in a chair, she sat & smoked several pipes of Tobacco, which she had been accustomed to do for ye cholic. At length she complained of drowziness & at her own request was laid upon ye bed & allowed to repose. She slept quietly, except when awakened to moisten her lips, nearly 3 hours. Afterwards she was again raised into a chair, at which time a quantity of bloody water, which ye attendants again took for an haemmorrhage appeared, which during her repose had penetrated ye sheet, which was round her & stained ye Linnen upon ye bed. On this account, as well as evident marks of encreasing debility which seemed fast gaing [sic] upon her, such as an encreased frequency smallness & weakness of ye pulse & an exhausted countenance, her danger was deemed imminent.

Although there were no pains it was deemed expedient to make a further examination, to ascertain whether ye os internum might not be so far dilated as to admit ye hand in order to bring ye child footling. But what must have been our surprise to find that no part of ye foetus could be discovered by ye vaginal touch? It had completely receded without our reach & no part of it could be felt!

A consultation being held & ye symptoms retracted, in order to investigate ye cause of this last most extraordinary phenomenon, we will recapiltulate ye leading & most prominent of them, which led to ye following conclusion. The patient had been exercised with regular & strong pains for about [no number given] hours, without ye head passing into ye pelvis in ye usual manner. Here we concluded that ye supposed distortion of ye pelvis was in fact a reality. That this principally, together with ye known rigidity of ye *Os internum* in *part* was ye true cause of preventing its descent. Furthermore in ye midst of a strong pain ye unusual sensation of ye abdomen took place, which instantly as it were arrested & suspended ye operation of ye labor pain, & finally prevented their recurrence. Directly after this unusual sensation of ye abdomen, a discharge of bloody water from ye Vagina followed. Lastly, upon examination being made sometime after, it was found that ye foetus had quitted its former situation, & had compleatly receeded beyond our reach, so that no part of it could be discovered. The nature of these symptoms, together of ye order in which they succeeded each other in conjunction with an evidently increased fulness of ye abdomen (which ought to have been before mentioned) now dispelled every ambiguity & doubt, as to ye nature of ye case, and imposed upon us ye disagreeable task of giving it frankly & unequivocally as our opinion, that ye uterus was ruptured, that ye foetus had passed through ye breach into ye cavity of ye abdomen & that it was absolutely out of ye power of art to afford her any essential relief.

We advised to give her no additional pain by a fruitless attempt to deliver her, but to keep her as easy as possible, & wait ye tragical event. She was, at her own request undressed & put into a warm bed, & laid apparently easy for a while, but speedily came on *singultus*, vomiting, together with encreased lassitude & debility difficulty of breathing & a quick small pulse. At 7 O'Clock P. M. she began to throw up, or emit from ye stomach copiously an atrabiliary matter, which continued to recur at short intervals, with en-

creased labor of respiration, which each puking in some means relieved untill 13 Minutes past 10 being about 11 hours from cessation of her pains, when calling for ye bowl in which she puked, & making an effort she raised ye matter into her throat, but being too far exhausted to throw it out, she quackled * sunk and expired almost without a gasp, & apparently in ye calm exercise of her mind & ye free enjoyment of her senses, until within 5 seconds of her exit.

Her pulse grew quicker & smaller as her dissolution approached, & for a considerable time before she expired, while she evidently possessed her reason, it entirely ceased to be perceptible. As we had put our judgment at issue, by openly giving our opinion of ye nature of ye case, while she was living, we requested permission to inspect ye body after her decease, in order to demonstrate to ourselves, & others ye truth or error of our position. The request was granted, & ye following are ye phenomena which presented themselves.

Upon laying open ye parietes of ye abdomen, ye first thing that presented itself was a large male foetus, entirely extruded from ye Uterus lying across ye Ab——

[The report stops here at the bottom of a page. The next page is missing.]

*A provincial English word meaning "choked." The dictionary gives it as a transitive verb; it is used here intransitively.

NOTICES

PLYMOUTH DISTRICT MEDICAL SOCIETY

By the courtesy of the Executive Committee, an invitation to hold the January meeting at the Brockton Hospital has been accepted. Therefore the January meeting will be held at the Brockton Hospital, January 17, 1924, at 11 a. m. Clinic from 10 to 11 a. m. Speakers:

Edward P. Richardson, M.D., of Boston. Subject: "The Surgery of Peptic Ulcer." Discussion by Drs. Barrett and Goddard.

George A. Moore, M.D., of Brockton. Subject: "Report of a Case of Acute Intestinal Obstruction. Due to Congenital Atresias with Situs Inversus."

Luncheon, 1 p. m. Service Building will be dedicated after lunch.

WALLACE C. KEITH, *Secretary.*

BOSTON MEDICAL HISTORY CLUB

Meeting at Boston Medical Library, Monday, January 21, at 8.15 p. m.:

George Sarton, D.Sc., The Study of Medieval Science.

William Pearce Coues, M.D., Some Medical Episodes in the Life of Catherine II of Russia.

Light refreshments after the meeting.

JOHN W. CUMMIN, M.D., *Secretary.*

ANNUAL MEETING OF THE BOSTON TUBERCULOSIS ASSOCIATION

The annual meeting of the Boston Tuberculosis Association will be held at 3 Joy Street, Boston, on Tuesday, January 22, at 4 p. m. In addition to reports of the officers, Dr. David R. Lyman, Medical Director of the Gaylord Farm Sanatorium, Wallingford, Conn., will deliver an address on The Tuberculosis Problem as Applied to Children. This paper will be illustrated by the lantern and views will be shown of the Prendergast Preventorium for Children. Incidental to the meeting, children from St. Catherine's School, Charlestown, who have enrolled themselves in the Modern Health Crusade, will be present in uniform and will give a musical program, including songs and musical selections.

The Council of the Association will meet immediately following the general meeting.

HARVARD MEDICAL SOCIETY

The next regular meeting of the Harvard Medical Society will be held as usual in the amphitheater of the Peter Bent Brigham Hospital, January 22, 1924, at 8.15 p. m. The program follows:

1. Exhibition of cases.
2. Heliotherapy and Surgical Tuberculosis by Dr. Plato Schwartz, Buffalo.
3. Alpine Lamp Therapy in Tuberculosis by Dr. Edgar T. Mayor, Saranac Lake, New York.

All members of the medical profession, medical students and nurses are invited.

GILBERT HORRAX, M.D., *Secretary.*

THE NEW ENGLAND OTOLOGICAL AND LARYNGOLOGICAL SOCIETY

The annual meeting of the New England Otological and Laryngological Society will be held on Thursday evening, January 24, 1924.

The annual dinner will be served at 7 p. m. at the University Club, 270 Beacon Street.

Dr. Crockett will read a paper on "Meningeal Complications Following Septal Operations," and Dr. Emerson will follow with a paper on some new work recently completed, entitled "Is Slowly Progressive Deafness a Rhinological or Otological Problem?"

At 4.30 p. m. there will be a clinical meeting at the Massachusetts Charitable Eye and Ear Infirmary under the direction of the staffs of the Massachusetts Charitable Eye and Ear Infirmary and the Massachusetts General Hospital Throat Department.

FRANK E. KITTREDGE, *President.*
JOHN H. BLODGETT, *Secretary.*

SOCIETY MEETINGS

DISTRICT SOCIETIES

Essex South District Medical Society:

January 23, 1924:—Lynn Hospital. Speaker, Dr. Frank H. Lahey of Boston.

March 19, 1924:—Salem Hospital.

May 7, 1924:—Annual meeting, Relay House, Nahant, in conjunction with Lynn Medical Fraternity.

***Hampden District:*—The meetings for the year are as follows:**

January, 1924, at Springfield. April, 1924, at Springfield; annual meeting.

Hampshire District Medical Society:

Meetings held bi-monthly, the second Wednesday in the month, at Boyden's Restaurant, Northampton.

Middlesex South District Medical Society:

January 30, 1924:—Combined meeting with Suffolk District at the Boston Medical Library.

Suffolk District Medical Society:

January 30, 1924:—In association with the Boston Medical Library and the Middlesex South District Medical Society at the Boston Medical Library at 8.15 p. m.

February 27, 1924:—Meeting of Surgical Section, in association with the Middlesex South District at the Boston Medical Library at 8.15 p. m.

March 26, 1924:—Meeting of the Medical Section, in association with the Boston Association for the Prevention and Relief of Heart Disease, at the Boston Medical Library at 8.15 p. m.

April 30, 1924:—Annual meeting, to be held at the Boston Medical Library at 8.15 p. m.

***Worcester District:*—The meetings for the year are as follows:**

February 13 at Memorial Hospital, Worcester.
March 12 at City Hospital, Worcester.
April 10—A public meeting.
May 8—Annual meeting.

STATE, INTERSTATE AND NATIONAL SOCIETIES

Schedule of meetings of the *New England Dermatological Society:*

Wednesday, February 13, 1924, at 3 p. m., in the Skin Out-Patient Department, Massachusetts General Hospital.

Wednesday, April 9, 1924, at 3 p. m., in the Surgical Amphitheatre, Boston City Hospital.